THE

Journal of the American Medical Association.

EDITED UNDER THE DIRECTION OF THE BOARD OF TRUSTEES.

PUBLISHED WEEKLY.

VOL. XV. CHICAGO, NOVEMBER 8, 1890. No. 19.

ADDRESSES.

THE MEDICAL PROFESSION AS A PUBLIC TRUST.

Annual Address before the N. Y. State Medical Association at its Seventh Session, in the City of New York, Oct. 22, 1890.

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OF BINGHAMTON, N. Y., PRESIDENT OF THE ASSOCIATION.

The history of medicine through ancient and modern times, reveals the fact that it has always kept pace with the physical and moral sciences, and its origin and growth as an element of civilization, is worthy of consideration and attentive study. It is pleasant, and sometimes profitable to turn on proper occasions from the activities of professional life, to the contemplation of the past, to the sources of our art, to the principles and necessities that called it into existence, to the trials and struggles of our professional ancestry. We shall thereby be the better able to comprehend our own favored position, to understand the extent of our advancement, to what causes we owe our progress, the labors and achievements still before us, and the places of honor to which we ourselves are likely to be assigned when the history of the present shall be written. But I do not intend, certainly not at this time, to call into review the periods which have marked the advent and progress of medicine in the various countries and nationalities of the globe. That has been already done by far abler hands, and is indeed a part of the classical history of our profession.

It is sufficient for my purposes in considering the present position of the medical profession of this country as a "Public Trust," to recognize its status as comprehended under its opportunities for education and instruction, its standard literature and journalism, its social position, its society organizations and ethical spirit, its legal relation, its scientific investigations, and its crowning glory in its opportunities for the prevention of disease and the prolongation of life.

The intelligent people of this country have laid firm hold upon the principle, that knowledge is the universal right, duty, and interest of man, and that the education of the masses is indispensable to the extension and preservation of free institutions. With the establishment of this fundamental principle, and interwoven into the policy of our State and National Governments, we recognize the reciprocal relations which should subsist between the citizen and the constituted authorities. Our country is our commonwealth. We have all an equal share in her; her laws are alike for the protection of all; her blessings are our common privileges; her glory is our common pride. But common privileges impose a common responsibility, and equal rights can never be disjoined from equal duties. The constitution, which under God, secures our liberties, is in the keeping of us all. It is a sacred trust which no man can delegate; he holds it for himself not only, but for his children, for posterity and for the world. And he who cannot read it, who does not understand its provisions, who could not on a just occasion assert its principles, no more sustains the true character of an American citizen, than the man who would not seal it with his blood.

It is a principle of all good government and older than written constitutions, to provide for the safety of the people, and to secure to them life, liberty, and the pursuit of happiness. Political economy was designed for the improvement of mankind, and that system is a true one which educates and elevates the people; which dispenses equal, exact, and speedy justice; which maintains a high standard of public and private morals; which encourages virtuous industry and seeks to eradicate pauperism and crime.

From the wise system of common schools adopted in this country, and which may be regarded as the true palladium of our freedom, prosperity, and happiness; the door is wide open in the higher schools, in the academies, colleges, and universities for every young man of genius and enterprise. This has been made possible even for the worthy sons of poverty, by private munificence and State patronage; and a liberal education is within the grasp of every deserving student who wills that he will have it. These latter days of the nineteenth century are witnessing the most stupendous strides in every department of science, literature and art; and that man must be indeed a poor observer of the signs of the times, who does not readily associate these

advancements with the modern plans and provisions for education and the diffusion of knowledge.

While every profession and honorable vocation has been stimulated to activity and advanced in power and usefulness, in proportion as it has kept pace with the progress of knowledge; it is with the opportunities afforded the medical profession of this country for education and instruction, that calls for special recognition at our hands. I am not ignorant of the fact that it has been quite the fashion for many years past and even to the present time for essayists, special committees of medical organizations and pessimistic medical writers generally, to deplore the annual exodus of hundreds and thousands of graduates from our colleges. Perhaps the law of supply and demand may not have always operated with precision. Perhaps some or even many of these new disciples of Esculapius, may not have carried with them to their abodes on the distant frontier settlements, all the mature judgment, precision in diagnosis, and skill in treatment, which comes for the most part only by experience and patient, continued study, after college life is ended. But even with the many lamentable exceptions of incompetency and discredit to the profession, I still believe the great majority of the graduates of scientific medicine in this country at the present day are a credit alike to themselves, to the colleges, and to the commonwealth. The time is rapidly approaching, and indeed is even now at hand, when most of the medical institutions organized for instruction, will furnish every facility for a most thorough and efficient education.

The ready acquiescence in the general demand of the profession for an extension of the college term and curriculum, and also a requirement for a proper preliminary educational qualification for entrance upon the study, is evidence of a united desire and effort to elevate the standard of medical education. In part fulfillment of this desire, is the recent enactment in this State of a law creating an independent board of medical examiners; and while with some of its provisions we may well take exceptions, yet as far as the colleges with which we have any affiliation are concerned, and their students, no harm can come to them. While I am a firm believer and advocate of every measure which may tend to maintain and advance the honor and interests of our profession, and recognize the influence of a proper academic training upon the habits, thoughts, and powers of discrimination as well as the advantages and great importance of a well-rounded intellectual culture. I am not yet prepared to say with some, that the doors of our medical colleges should be closed to all persons, except those wearing literary degrees; but I trust the time is near, when their equivalent at least will be the universal possession of every medical student. With perhaps no exceptions, the announcements of the various colleges of this country for the coming sessions, make it a distinctive feature, that proof of a proper preliminary qualification will be required of students before matriculation or graduation. But while this is encouraging and evidence of some advancement in the right direction, it would be much more satisfactory to the profession if all colleges would state specifically in their announcements the kind of preliminary examinations applicants would be subjected to, or the specific proofs of fitting education required. It is certainly very evident that the trend of the times is in favor of a much higher and more complete preparation for the medical calling; and I trust the day is not distant when not only a minimum qualification will be indicated, but a maximum attainment rightly recognized and honored. Why not have degrees of special significance and distinction in the medical as well as in other professions? The stimulus of emulation is often required to develop the latent talents, and it is but right not only to afford the opportunities, but to recognize and applaud true merit and success. The medical institution that will plant itself upon such a platform, will prove in the end the most popular step ever taken in this country, and around it will cluster an alumni honored at home and abroad. To such an institution endowments are sure to be multiplied until it rests upon an enduring foundation, affording the highest facilities for a thorough and complimentary education, exalting the honor, interests, and usefulness of the profession. But while we are looking forward, working and fondly hoping for the final fulfillment of these perhaps Utopian dreams, still, we may even now ask, are the insinuations true so freely offered from some quarters, that the majority of American medical colleges are far below par, in their opportunities for instruction and their standard of qualifications for graduation? I doubt the justness of this wholesale indictment and slaughter of the innocents without specifications. I am not standing here to shield or excuse any college for dereliction of duty or incompetency, but it seems to me it is high time for the profession to demand a halt in the incessant harangues disparaging to the standing of American medical colleges. Their general abilities for offering abundant opportunities for thorough instruction cannot be truthfully questioned. I believe the great majority of them are more than ready to meet every just requirement of the profession, and that whatever of blame there may be rests at our own doors, in the unqualified and unsuitable material we are permitting or encouraging to engage in the study of medicine. Let every office in the land be permanently closed to students of questionable natural ability and proper preliminary education,

and we shall cease to hear of the incompetency and duplicity of our medical colleges. To those of us who entered upon the study of medicine forty, thirty, twenty, or even ten years ago, it is a surprise and gratification to look over the annual announcements of the colleges for the sessions of 1890 and 1891; or better still to visit those institutions, and be eye witnesses of the many and great opportunities afforded the modern student of medicine, in the extensive curriculum of instruction embraced in the didactic and clinical lectures; the advantages of practical laboratory work in chemistry, physiology, pathology, experimental therapeutics, and other departments of medicine; the admirable arrangements for dissection; the special practical instructions and exercises in the departments of medicine, surgery, gynecology, ophthalmology, and otology designed for graduates and undergraduates; the resources for clinical instruction afforded by the numerous and well equipped hospitals, dispensaries, infirmaries, and asylums; the advantages accruing to the profession from the establishment of post-graduate schools, and polyclinics, and colleges for graduates; and finally the founding of extensive medical libraries and museums, freely accessable to the profession. For all these, and more, we should be profoundly thankful and congratulate ourselves that the closing years of the nineteenth century find the medical profession of this country, with advantages and opportunities for instruction quite equal to those of Great Britain and Continental Europe.

It would consume many years of incessant study and observation to exhaust the resources afforded by such medical centres as Boston, New York, Philadelphia, Baltimore, Chicago, and many cities in the north, south, east, and west. At the risk of criticism, I do not hesitate to affirm, that for the practical every day service of the average American physician, the opportunities afforded in this country for professional instruction, both didactic and clinical, are not only amply sufficient and of the highest excellence, but equally or better adapted to his wants than the renowned institutions of the Old World.

With a general advancement to a higher standard of merit, qualification, and facilities for instruction in our seats of professional learning, the plans adopted for collective investigation of disease, and opportunities afforded for original research; there has arisen for us an elevated, distinctive, and permanent medical literature.

It is impossible to avoid the conviction, that the state of medical literature at any period, is the true and only criterion of the condition of the contemporary science and art; and if the history of medicine sustains this conviction, we may rightfully conclude that it is also true of the present, and that the status of the profession in this country may be inferred from the quality of its literature.

While during the first half of the present century there appeared many standard works of great merit by American physicians, conferring honor upon themselves and upon American medicine and literature; it is during the closing half of the century, that the most marked advances have been witnessed in the rapid issue of volumes of great erudition and acknowledged value; establishing an enviable reputation for American medical scholarship and authority, and the highest appreciation at home and abroad. But the special characteristics of the medical literature of the present day in this country, are largely due to its journals and transactions of its organizations; they comprise indeed the most original matter, and most truly represent the active living thought of the times, and the daily wants of the great mass of the profession. I have no fear of a contradiction in making the assertion, that American medical journalism is not only characteristic of the age and of the country, but has assumed proportions and weight of character unexcelled by any other department of literature, science, or art. The light of medical science emanating from these sources is shedding its powerful rays of quickening influence abroad upon the medical profession of this whole country, molding, guiding, and even controlling their very thoughts and actions in many of the relations of social, ethical, and professional interests.

Honorable and enlightened medical journalism of the present day, is doing, and will do, much more to advance the educational interests and standing of our profession, than all the forces of State and National legislation combined.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION, which from its inception was designed to represent in the broadest sense, the true status and progress of the profession of this country, should be recognized and maintained as the authorized expression of the thought, purposes, and will of American physicians.

A reciprocal relation should exist between THE JOURNAL and the profession, and to this end, it should be on the subscription list of every physician throughout the length and breadth of the land. We are all of us preferred stockholders in that journal, and should see to it that its interests and our own are fully protected. But while acknowledging our loyalty to the Organ of the National Association, we must by no means forget our great indebtedness to those journals issued from the medical press of the larger cities in every section of the country.

They are so replete with the results of laborious research, of large experience, of scientific discovery, and every page filled with the most recent observations and discussions in every department of our science. To rightfully discharge the responsible duties of the trust confided to him, the physician must be informed upon those

methods and advances which increase the usefulness, extent, and exactness of his knowledge; and the greatest and most satisfying aid in all that appertains to progress and improvement, is the reliable medical journal which visits him from month to month, and from week to week. His subscription is an investment compounded many fold.

In the present state of medical science in this country, and the subdivision of its departments for special investigation, we see the activity of united efforts combined in organizations and journals specially devoted to such interests; and hence we find, particularly in the great medical centres, a large increase during the past few years of literature devoted to a definite field of labor. Without calling in question the ultimate utility and effect of this multiplication upon the future of the profession, we may rest assured that the fundamental truths of our science will ever remain, and that we may cheerfully welcome every honest laborer into the fields of our science already "ripe for the harvest."

Our medical journalists have done a great and distinctive service, especially to the younger members of the profession, by inviting and encouraging the frequent expression of original thought for the press.

The systematic and conscientious use of the pen as a means of mental development has long since been fully attested by the recorded experience of the best thinkers and writers of every age. It is the duty then of every physician, not only to select as his daily companions, medical journals devoted to the interests of the profession at large, and work of the general practitioner, and also some publications designed for special fields of labor as his inclination may dictate; but he should also contribute his mite or of his abundance to their columns, recording his observations, his mature thoughts, his conclusions, and sustaining with generous sympathy every effort of real progress in his profession.

Referring to the *social relations* of the medical profession of this country, we are thankful that as yet there are no established ranks, grades, or castes of society, which would assign the members of our profession to a special social standing; but that it is precisely what the education and qualities of the individual make them. The intelligent and gentlemanly physician is not only received as a welcome visitor at the fireside and at the bed of sickness in all shades of society, from the highest in the State to the lowest, the wealthy and the beggar alike; but he is also awarded as honorable a seat in all public assemblies whether social, literary, scientific, or otherwise, as the members of any other class of the community. In part as a compensation for his isolation from the advantages, emoluments, and honors of his highly favored brethren in the Metropolis; the intelligent, educated rural physician, is not only often a leader in the social affairs of his district, but is usually the central power in every educational, literary, hygienic interest involving the welfare of the community.

The simple title of "doctor," however, does not by any means carry with it a passport into social life, or give him a position above that which his education, habits, and gentlemanly conduct entitles him. It is in the reciprocal relations of the medical profession to the individual that is to be found a field for the highest cultivation of the noblest instincts of our nature. The constant care of the sick, the suffering, and the dying, cannot but imbue the conscientious physician with an appreciation of the greatness of his mission and of the responsibilities he assumes. In the comfort, health, and lives of those committed to his care, he is answerable to the solemn tribunal of his own conscience for carelessness or neglect of duty.

A thorough preliminary preparation and constant efforts for the accumulation of knowledge by research, careful observation, and experience can alone qualify and render his life serene in the consciousness of having faithfully tried to fulfil his professional obligations as a "Public Trust."

The relations between the physician and patient are necessarily and so often of an intimate and confiding character, that the small aggregate of cases of misplaced confidence is a compliment to the integrity of our profession. This relationship involves the strictest rectitude and every moral attribute of the Christian gentleman.

The virtues above all others that a physician must possess, are self-denial and self-devotion, not only to carry him through the slights and crosses in his career, but also to exalt him above all and every sort of temptation, that he may always be the perfectly reliable repository of personal and family honor. This reliability is the most essential quality of the physician's character. No talent, no skill, no genius even, can compensate for its absence. But the multiplied public and private relations of our profession are known to us all, happy indeed are we, if we faithfully strive to guard the trust committed to our care.

Our duties are arduous, peculiar, and responsible, and no illegitimate considerations should divert us from their strict performance. If the physician's best services are not always appreciated and rewarded, if he may never hear the resounding applause of the populace which follows the spasmodic efforts of the orator or statesman, nor his pathway strewn with flowers like the returning conquering hero, yet if he has conscientiously and with fidelity tried to do his whole duty to those committed to his care, when he comes to give up his stewardship he may hear

the welcome plaudit, "Well done thou good and faithful servant."

To the *Society Organizations* of the medical profession of this country, we must look for the effective and permanent influences which have been exerted, giving to it as a body vitality, power, and character. The English of an old Greek proverb, that, "one man is no man," concisely expresses the great truth that man is never independent of his fellow-man. The development of his physical, mental, and moral capabilities cannot be effected alone; nor can the great purposes of life, for which he is intended be accomplished, and the comforts and happiness, which he is constituted to enjoy be realized, without the coöperation and companionship of others. However humiliating this reflection may be to man's feelings of self-sufficiency and self-complacency, he is forced to acknowledge its truth when he observes the progress of individuals and the advancement of civilization. The advantage and even necessity of association for the promotion of useful knowledge has been so generally recognized, that "learned societies," consisting of intellectual men voluntarily united for this purpose have been formed and continued for many generations, especially in the Old World, under names indicative of the particular branch of human learning they have been designed to promote.

The objects of these associations have not been simply the acquiring of knowledge, but the more useful one of communicating it, in announcing discoveries, deducing general laws from numerous facts, correcting false theories, and rendering knowledge more accessible and useful. A society is none the less entitled to the appellation of learned, if it be quite professional, and if its plan be not as comprehensive as that of the Royal Society of England, which is intended for the promotion of general literature, philosophy and natural history.

When we see the most distinguished physicians in Europe and America, those who have done the most to enlarge the boundaries of our knowledge, standing shoulder to shoulder as originators and active supporters of associations, believing them necessary, for mutual improvement and the advancement of medical science; the medical men of this day, young and old, may well distrust their own judgment, if they are inclined to doubt the utility of medical societies. There are abundant reasons why the medical profession should enjoy the full benefit of associated talent, and feel the influence of a liberal, enlightened and earnest consideration of the various topics which must claim the attention of the physician. With the great advantages we possess, we should as associations, and as a profession, strive to develop our science more rapidly and more perfectly in the future than it has been in the past, and that our progress should be more marked in all that relates to the higher aspirations of our calling. The period in which we now live demands an intelligent and catholic spirit, as a pervading element in the whole body; so that the improvement in the science shall correspond with the progress of our race, in all that is great and worthy of the age. May this Association be the grateful agency in the unification of the members of the medical profession of the State of New York, in all that relates to their honor, to their interests, and to their usefulness.

With the incentives to society organizations, there arose a more formal recognition of the *ethical spirit* or *moral tone* which should pervade and control the profession. It became an important part of a medical education and included, not merely medical etiquette, but rules for the guidance of the physician in all the relations into which he might be called by the practice of his profession. Without arrogating too much and within the bounds of modesty, we may assume it is probable, that not another equally numerous class of men can be found, who more rigidly and tenaciously adhere to rules of an ethical character, than is done by the medical profession of this country. Admitting of exceptions, there is a disposition on the part of the regular profession of medicine, to foster and protect the interests of each other; and with a commanding moral tone to frown upon and discourage every immoral practice and vicious conduct among its members; believing the greater the trust, the greater the betrayal.

Referring to the *legal status* of the medical profession of this country, it may be said with some exceptions, that legislative enactments regulating the practice of medicine have been in the main salutary, and if thoroughly enforced, may be productive of much good to the profession and safety to the people. The highest interests of society require the adoption and enforcement of such legal regulations as will ultimately insure a high standard of education and mental discipline before entering upon the study of medicine, as well as efficient methods of securing the attainment of a fair standard of professional qualification before receiving a license to practice.

The regular medical profession do not ask of the State special privileges and immunities, no, they ask that society should exact greater guarantees from them, and that a still higher standard of qualification be demanded; they ask that the public should take earnestly in hand for self-defense, means for repression against the hordes of impostors, who trade on public credulity; they ask that both the secular and religious press, the clergy and men of position and influence should consider well the moral responsibility they as-

sume in the thoughtless or intentional commendation of the plausable quacks and their worthless nostrums.

It is, however, the *pervading spirit of scientific investigation* in the medical profession that has marked its career in the past and is leading it on with rapid pace from discovery to discovery, from victory to victory over the forces of nature in the production of disease; alleviating the physicial sufferings of humanity, rescuing from preventable disease and from untimely death. There is nothing more satisfactory in the present aspect of medical science or more likely to raise it above the region of empiricism and place it on a higher scientific standard than the efforts now being made to render our knowledge more definite and exact; nor are signs wanting which point to the probability of such a consummation. We see on every side, the more rigid application of the inductive method of investigation brought to bear on the great problems of medicine, and we doubt not that the observations which are being carried on by earnest workers, especially those conducted under the plan of collective investigation, and by original research, will ere long bear still richer fruit leading to generalizations of the most important character, largely increasing our powers of differentiating between the variations which disease presents, diagnosis and prognosis made more easy and exact, and treatment more successful.

The spirit of scientific investigation which is becoming so characteristic of the present period in the history of our profession, must have derived an impetus and beneficial influence, from the more active cultivation of the physical sciences, which has lately assumed an important and proper position in the educational curriculum of the higher schools, academies and colleges of our country.

Resting, as medicine does, on a basis of scientific observation, and depending for its advancement on research and the practical application of discoveries in science, it is intimately associated with the development and progress of other sciences. In fact, there is scarcely nothing in the whole range of nature or of art, which the physician may not make use of for the purposes and accomplishment of his work. There is also another and not unimportant circumstance connected with the more general cultivation of the physical sciences which is destined to exert a beneficial influence upon the status of our profession. I refer to the higher and intelligent estimate in which the scientific physician will be held by the public at large. In proportion to the general diffusion of scientific knowledge in the community will be established for our art a recognition of its just claim on the confidence and gratitude of mankind.

But the crowning glory of the medical profession is its *opportunities for the prevention of disease and the prolongation of life.* Herein is consummated the responsible trust committed to our profession. In the economy of the State seeking for the preservation of the health and lives of a classes of citizens, it becomes necessary to enact sanitary laws and to enforce obedience to them; but in order that the people may know just what to do and how to protect themselves from the ravages of pestilential disease, State Boards of Health are created for the express purpose of diffusing the needed information. Sanitary laws are simply an application of the science of medicine in the form of remedies or preventives to the people of the State. They teach not only the inestimable blessing, life-giving and life-preserving influences of glowing sunshine, pure air, pure water, and wholesome food; of the importance of ventilation, drainage, disinfection, and vaccination, but also the absolute necessity of a proper use of these great gifts of nature, chemistry and discovery.

It has long been recognized as the peculiar province of the medical profession to aid the authorities and recommendations of the State in all matters connected with public hygiene; and especially is this true, in the efforts to avert an impending scourge or to abate the ravages of those terrible epidemics, which destroy life with the fearful rapidity of a tornado, whose pathway is marked with desolation and while they continue strike a whole community with terror and dismay.

The sacredness of human life and the inestimable value of health are incentives that can be always relied upon to secure the coöperation of all true physicians in every matter relating to the sanitary condition of the State and the lives and health of the people. It is in this relation that our profession can best reciprocate its obligations to the public and honor the trust confided to its keeping. There is indeed a vein of chivalry in the medical profession. It heeds the cry of suffering from the poor and lowly, and no pestilence stricken city has ever made an appeal for aid without meeting with a quick response. It has no secrets, no patents, but always holds its gifts of healing in trust for the public good. But busy as we are with the demands of an exacting profession, it is quite possible that many of us have failed to recognize in its true character, that other and important trust, the service that we could render the community by diffusing among the people by every available method, pertinent, reliable, comprehensive, popular sanitary knowledge.

Medical philanthropy and enlightened statesmanship, have made success possible in a grand sanitary movement throughout this country, by organized effort against preventable disease and unnecessary death, against the ills which torture humanity and enfeeble the State. The individ-

ual physician, each in his own sphere a power, has been foremost among all the agencies to mold public favor for organized hygienic work.

United in their influence, physicians have inspired confidence and a willingness among their patrons and neighbors to coöperate with them in their efforts to discover and remove the preventable causes of disease from their midst. When we cannot legislate, we can still teach; when we cannot command, we can still warn, and neither the existence nor absence of power, neither the expediency nor inexpediency of interference by the proper authorities, can exempt us from the duty of knowing what is amiss in the sanitary condition of a community, and diffusing that knowledge far and wide.

Undoubtedly the first and most important step is the education of the masses in the essential facts of sanitary science. There never was so teachable a people as our own. The respect for science is wide-spread among them, and our public education has made a large body in every community sufficiently acquainted with the elements of science to receive with profit its practical application in matters of life and health.

The medical profession can best promote sanitary progress, by aiding in the dissemination of information as to the established facts of the etiology and protection from preventable disease, and the inevitable consequences of their disregard. This can best be attained through sanitary associations and publications, and especially by calling to our aid that important agency and instructor, the secular press, which has indeed become in this country for the citizen what the school is for the child.

Groaning night and day under the weight of its mighty energies to keep pace with the advancement of civilization, commerce, science, art, social, political, and religious activities of the age, the press wields the mightiest power for influence in the land.

It is characteristic of the American mind in its inventive genius and practical application, to utilize every power within its reach, to make subservient every agency to its interests, and there is no nation on the globe where the masses of the people absorb so much reading matter from the infinite variety of publications. The newspaper in this country is not only one of the luxuries, but is almost a necessity in every family; it is true it has its shortcomings and some objectionable features in its tendency to sensationalism, and oft *quasi* advertisement of quackery, in its apparently editorial endorsement of the wonderful cures of some secret or patent medicine; yet it is undoubtedly an institution of the greatest value and power for good, and should be utilized by the medical profession and sanitarians in the diffusion of hygienic knowledge among the people.

In the furtherance of this thought, I offered some suggestions in an address which I had the honor of delivering at the annual session of the Third District Branch of this Association, in June last, on "The Popularization of Sanitary Science," and which, with your indulgence, I desire here to reproduce.

My proposition was this, "That the medical organizations of this State shall be invited to appoint annually a special committee on 'Popular Sanitary Science,' whose duty shall be to prepare or supervise familiar articles for the secular press on subjects involving the care and protection of life and health of the individual and of the community, in accordance with the accepted principles of sanitary science. That State and local boards of health shall also be solicited and urged to publish for free distribution, through the medium of the public schools, tracts on practical sanitation."

From some such plan as I have thus indicated, or the organization of a Central Bureau or Council of Hygiene and Public Health connected with this Association, there would emanate a flood of light and practical knowledge, instructing an intelligent people in the principles, truths, and proper application of sanitary science; making possible a grand sanitary movement against preventable disease, and thus fulfil and magnify the trust committed to our profession. It is fitting that this Association, having a community of sentiment relating to the honor, the interests, and the usefulness of the medical profession; and within and around it the elements of permanency and success, should take the initiative step and afford an example worthy of adoption throughout this whole country.

Whatever of progress there may be in the coming century, in the advancement of our science in all that truly appertains to its highest mission, will emanate from a spirit of honest purpose, of profound study, of patient research, and a full recognition of the obligations resting upon each member of "the medical profession as a public trust."

ANTISEPTIC LIQUID.

The following formula is in use in some of the hospitals and dispensaries as an antiseptic dressing:

Boric acid, 240 grains.
Salicylic acid, 30 grains.
Water, 2 pints. Dissolve.

FOR CARDIAC DROPSY.

℞— Digitalis, gr. xij.
Sennæ fol, ʒ ss.
Aquæ bullientis, ℥ vj.
Fiat infusum, et adde:
Sodii iodid, ʒ ij.
Sodii phosphat, ʒ vj.
M.—S. ℥ ss every three to six hours.

—*Gerhard.*

ORIGINAL ARTICLES.

THE SURGICAL TREATMENT OF NON-PEDUNCULATED ABDOMINAL TUMORS.

Read in the Section of Obstetrics and Diseases of Women at the Forty-first Annual Meeting of the American Medical Association, held in Nashville, Tenn., May, 1890.

BY HENRY O. MARCY, A.M., M.D., L.L.D.,
OF BOSTON.

The ovarian cystoma which develop without a pedicle are rare, and yet are met with sufficiently often to make their study of interest and practical importance. They have been called intra-ligamentous, under the belief that they develop within the folds of the broad ligament, but I have never been able to demonstrate such origin. The explanation offered is that, by some error of development, the embryonic ovary becomes displaced. It has also been assumed that adhesions of the ovary to the folds of the broad ligament might cause these to grow with the tumor, and thus form a capsule over it.

The ovary, when not diseased, is often found with some degree of variation of attachment, as well as distribution of vessels. The pedicle may be so short that the deeper portion is almost, or quite within the reflexion of the peritoneal investment of the ligaments. When such a part becomes cystic, it will, of necessity, in its development, carry before it the peritoneum, and with it portions of the broad ligaments. Every operator, of considerable experience, has met with examples of this class of cases, and it has happened to me to find them in considerable variety, both as to the character of the growth and its origin. The variation in point of development will cause a change of relationship of the surrounding organs. The uterus and bladder may be carried quite upwards and to the side opposite the point of origin, when this is nearly central; if it commenced anterior to these organs it will be crowded into the pelvic basin; if posterior to the uterus, the cyst may be deeply planted within the pelvis. I have removed, with great difficulty, such a cyst, multilocular, within a few weeks, where the tumor pressed quite down into Douglas' cul-de-sac, behind the uterus and bladder, completely filling the pelvis.

The attachments also vary greatly in their appearance. They may be thick and vascular, the ligaments so changed as to be recognized with difficulty. In one case, a dermoid cyst, weighing about eight pounds, but the tumor more solid than fluid, the outer fold of the right broad ligament, which was distinctly hypertrophied throughout, was carried over the tumor quite to the base of the liver. In another, a large monocyst, the development appeared to be beneath the peritoneum, posterior to the ligaments, extending behind the cæcum, quite to the root of the mesentery.

The cysts of the broad ligament are usually single, but they vary considerably in character, two of the most difficult of removal which I have ever met having been proliferous, or papillary growths. It is important for the physician, as well as the surgeon, to be familiar with the varying phases of such development of pelvic tumors, because of diagnosis, as well as treatment. It may and often is impossible to differentiate clearly these growths before section, but the diagnosis must be determined sufficiently to decide upon exploration; as early operations are advised in order to avoid complications which, in their further development, add very greatly to the difficulties and dangers of removal.

The exact knowledge of pelvic tumors must often remain uncertain until after exploratory section, and the most experienced observers are not seldom the least sure of conditions which may exist. Where this is advised, it may seem almost superfluous to add, that the operator should do it with all the care requisite to meet the demands of modern surgery, that he should be prepared for any emergency, and deal with the factors involved therein.

We all remember the intense interest with which, for many years, the disposition of the pedicle of ovarian cysts was held in consideration. It may be assumed that few would now question its treatment by the intra-peritoneal method, with, in all aseptic cases, the closure of the abdominal wound.

The more general method, advised for the treatment of a large class of cystic tumors without pedicle, is a resection of as much of the cyst-wall as possible, and carefully stitching the retained portion to the lips of the abdominal wound, thereby shutting off the general peritoneal cavity, and treating the remaining cyst-pocket as an open wound with drainage. Even this is oftentimes exceedingly difficult, and the resulting mortality rates, in the hands of our most expert operators, are very large.

In the treatment of solid tumors of the pelvis, uterine growths especially, a great majority of operators still follow this method in a modified way, by making, so to speak, a pedicle out of the lower portion of the uterus, and attaching it, after constriction, extra-peritoneally, with the object of making it an external wound. The arguments urged in favor of these methods are similar to those, at an earlier day, advanced for the external treatment of the pedicle of ovarian cysts by the clamp, etc.

In a certain very large measure, the objections to this method of treatment are those which caused the abandonment of the extra-peritoneal treatment of the pedicle, greatly emphasized. Those who attempt the entire removal of the

growth and the closure of its base of attachment, do it by ligation in section, with the parts oftentimes so imperfectly secured, that great danger from hæmorrhage ensues, and frequently loss of life. Most operators who thus treat the basic attachment of the tumors hold subsequent complications in such fear that they do not deem it advisable to close the abdominal wound without drainage which, of itself, is an added danger of serious character.

The latest publication upon the subject by Dr. Meredith, of London,[1] I quote at some length, since it gives the method usually adopted in the Samaritan Hospital, where in all abdominal surgery the drainage tube is in general use.

Complications arising from extension of the growths beneath one, or possibly, both broad ligaments, with accompanying upward displacement and close adherence of the urinary bladder to the anterior surface of the tumor, as a consequence of its original development from the lower segment of the uterine body, often necessitates extensive enucleation in order to form a pedicle for the application of the serre-nœud wire. Occasionally, in such instances, the removal of the uterine appendages may be found feasible, and should then be performed in place of the alternative operation of hysterectomy. But, more often than not, in cases of such nature as that above described, the first-named procedure is not available with safety, and the major undertaking has to be faced. The chief dangers entailed thereby are due to *hæmorrhage*, which must, in the first place, be avoided by securing the ovarian vessels in either side of the uterus. This is to be effected by transfixion and ligature of both broad ligaments below the level of the uterine appendages, and followed by their subsequent division after means have been taken to control the return circulation from the upper portion of the tumor, by the use of compression forceps. The next step required is that of freeing the displaced bladder from its connections with the anterior surface of the tumor. With this object, a horizontal incision through the capsule of the growth, beginning and ending, at the seat of ligature of the broad ligament, is carried across the front of the tumor, passing at a level of half an inch, or rather more, above the upper limit of the adherent bladder, which is then stripped downwards sufficiently to avoid its subsequent inclusion in the serre-nœud wire. Should these means not suffice for securing a suitable pedicle, resort must be had to further enucleation, necessitating the constriction of the base of the tumor by the use of an elastic ligature twice looped, and secured by clamping with artery forceps. Care should be taken to include in this ligature both the ovarian pedicles, and also the free border of the previously divided capsule connected with the fundus of the bladder. A horizontal incision through the uterine capsule, connecting at either end with the seat of ligature of the broad ligament, is now carried across the posterior aspect of the tumor, the base of which is then rapidly enucleated sufficiently to admit of the application of the serre-nœud wire, below the level of the elastic ligature, which is subsequently removed. The ultimate success of the operation, as before stated, depends in great measure upon the proper adjustment and management of the stump, by the adoption of means for ensuring the early protection of the peritoneal cavity from the dangers entailed upon it by the necrosis of the tissues constricted by the wire. The tumor having been cut away, after transfixion of its pedicle by a stout pin passed immediately above the wire, the distal portion of the remaining stump is to be trimmed down as much as possible, and its raw surface is then covered in by lacing together the edges of its peritoneal investment with a continuous suture. The margins of the divided parietal peritoneum are now accurately adjusted around the stump in the groove formed by the wire, before being closely united at its upper border by a silk suture, which should also include a fold of the peritoneum covering the posterior aspect of the stump immediately below the wire. The ends of this stitch are then cut short, and the rest of the abdominal incision is closed in the usual manner. Finally, the stump is surrounded and covered in with dry, absorbent dressing, which should be left undisturbed for at least five or six days.

In an interesting paper published by Dr. Skene,[2] of Brooklyn, after emphasizing the process of enucleation quite as I have practiced it for years, he advises subsequent treatment as follows:

The management of the ligaments after the cystoma is removed, is first directed to the control of hæmorrhage. In some cases a general oozing is all that there is. Occasionally a wounded vessel here and there needs ligating. When the cyst extends deep down into the pelvis there is often very troublesome bleeding from veins. These should be ligated, if possible, but if that cannot be done, pressure with a hot sponge should be tried, and if that fail, styptics may be used. The ligamentous capsule now presents a pouch, the inner surface of which is raw, and from which there will be some bleeding and much serous oozing. This should be treated as follows: The upper portion of the opposing sides should be folded in so as to bring the peritoneal surfaces together, and these should be fixed by a continuous catgut suture. The suturing should begin on both sides, and be from the sides toward the centre, and close the parts, except at a point beneath the abdominal wound, where an open space should be left for the drainage tube. If the ligaments thus brought together by sutures can be brought up to the lower angle of the abdominal wound, they should be fixed to the abdominal wall by silk sutures passed through the ligaments on each side of the opening for the drainage-tube, and then through the wall of the abdomen. When the ligaments cannot be brought up to the wall of the abdomen a drainage-tube without side openings should be carried down to the bottom of the cavity.

While this mode of treatment is perfectly satisfactory in suitable cases, there are difficulties attending the operation in exceptional cases, and hence certain dangers. The cyst-wall may be easily torn, and hence the danger of leaving portions of it. When this happens it is necessary to destroy the secreting surface. This may possibly be done by applying pure carbolic acid. The most difficult part of the operation, in some cases, is to stop the bleeding. This has been referred to; but I may say further, that the oozing at the time of operating, and the liability to suppuration which may occur afterward, render the convalescence rather tedious in many cases.

The late Dr. J. F. Miner,[3] of Buffalo, in a paper first published in 1869, in the *Buffalo Medical and Surgical Journal*, upon "Ovariotomy by Enucleation," furnished a contribution to the medical profession of permanent value. He taught the practicability of enucleating the cyst of the ovary from its peritoneal investment, a histological fact long known, but never made available in surgical practice, until brought forward by Dr. Miner. This most distinguished

[1] "Present Position of Abdominal Surgery." Lancet, April 19, 1890. Page 836.

[2] "Intra-Ligamentous Ovarian Cystoma." N. Y. Medical Record, April 19, 1890, p. 438.

[3] Transactions of International Medical Congress 1876, p. 810.

surgeon sought to make of practical value this fact. He states:

> There is no need to point out the advantages of this plan. Those, who have studied the history of ovariotomy, and who are familiar with the difficulties and objections which may fairly be urged against the ordinary methods of procedure, will at once perceive that, if enucleation is successful, there is no pedicle to keep open the lower angle of the wound, or to drag upon the parts. No unfavorable adhesions of the pedicle, no wires to be discharged by suppuration, and no crusts of burned tissue to be provided for. The abdominal cavity has simply been opened, and the diseased part removed, all that is left behind is capable of life.

The stripping of a large portion of the peritoneal investment of the cyst, and returning it within the peritoneum, as advised by Dr. Miner, offers little if any advantage over the use of the ligature in tumors where the pedicle is well-defined. The fear of hæmorrhage, the too general septic conditions, the returning within the peritoneum of a considerable portion of superfluous tissue, caused the method of Dr. Miner to fall into disuse. However, a modification of it, which I have used for a number of years without exception, is of great practical value. It consists in sewing off the pedicle, usually with several double continuous sutures, and then dissecting the peritoneal investment away from the cyst, at its base, to the extent of about an inch upon either side, and then, by a sero-serous continuous *tendon* suture (stitches taken parallel to the cut tissues), inverting the divided edges. The advantages which this procedure offers are, that the base is constricted sufficiently tightly to control hæmorrhage without producing necrosis or undue nerve tension, while the inversion of the divided edges leaves no freshly cut surfaces for infection.

The cystic tumors of the pelvis which, for any reason, fail to develop a pedicle, almost without exception may be safely treated by a modification of this method. The tumor, if cystic, is emptied of its contents as usual. The peritoneal investment is stripped from the cyst, which is removed by enucleation. Bleeding vessels are temporarily secured by pressure forceps or torsion. The investing tissues are seized by strong clamp forceps and drawn upward by an assistant, so as to define clearly the basic attachment of the growth. Then, with a double continuous tendon suture, they are sewed evenly through, as deeply as convenient beneath the attachment of the cyst, their entire extent, not seldom several inches in length. This completed, the hæmorrhage is securely controlled, and the redundant tissues are trimmed away with scissors, leaving only sufficient material for the inversion of the divided edges by a sero-serous continuous suture. In a very considerable number of cases of this type, I have been enabled to complete safely the operation, and to close the abdominal wound, where, otherwise, it would have been impossible. In two instances the line of the suturing measured about 9 inches. In no case have I had complication of secondary hæmorrhage, or septic infection.

In illustration I quote from the record of the Boston Gynecological Society the report of a recent specimen, presented October 10, 1889:

> Dr. Marcy presented an inflated unilocular cyst of the right broad ligament which he had removed at his hospital the previous week, assisted by Dr. A. P. Clarke, of Cambridge. The case was one of exceptional interest in that it had been allowed to develop until the sac and contents weighed 42 lbs. The girth of the patient below the umbilicus was over 40 inches. The operation was at last necessitated on account of dyspnœa and impeded circulation. The cyst had developed from the right broad ligament, not only without pedicle, but had carried up before it a fold of the peritoneum from its attachment in the median line to a point posterior to and on a line with the head of the cæcum. The question of its removal, therefore, was of difficult solution. A portion of the cyst wall could be brought into the line of the abdominal incision and stitched to the peritoneum, then drained and allowed to close by granulation. This necessitates, at the best, a long and tedious convalescence, rendered doubly objectionable from the weak and exhausted condition of the patient.
>
> The wall of the sac, along the border of its attachment, was covered by extraordinary varicosed veins. This seemed to threaten unusual danger from hæmorrhage. The emptied cyst was put on tension and, commencing at a considerable distance from its attachment on either side, the peritoneal investment was divided (as shown upon the inflated specimen), and the cyst was enucleated. The divided edges were caught and held by three or four pairs of Spencer Wells' compression forceps, while Dr. Marcy sewed through its base, with a double tendon suture in an even, continuous seam, measuring about 9 inches in length. Owing to the extraordinary size of the vessels, a second line of sutures was carried parallel to the first through the double fold of the peritoneum, about half an inch nearer to the median line. The superfluous tissues were resected parallel to this, and the peritoneum was intrafolded by a line of continued tendon sutures, sero-serous in character, the needle traversing the tissues parallel to the cut edges. The abdominal wall was closed in Dr. Marcy's usual method by four layers of tendon sutures, and sealed by iodoform collodion.[4]

The advantages of the above method are too obvious to require special mention. The cyst is entirely removed, the basic attachment is closed, constricted, but not devitalized by the even, continuous double suture, applied by means of the long curved needle set in handle with eye near the point, such as is most conveniently used in hernia, and which is familiar to most American surgeons. The tendon suture is preferable to catgut, but either, properly prepared, is trustworthy. Carefully sewed in the above manner, there can be no danger from hæmorrhage. The inverted serous surfaces leave no oozing stump or uncovered wound for absorption. The tissues lie evenly without strain or tension. Lymph in a few hours covers in the suture material and wounds made by the needle. The abdominal cavity, if necessary, is flushed with sterilized water, and the wound closed without drainage. Care must be taken not to include a ureter, not to pierce the bladder, or rectum; but the danger of sewing

[4] The patient was discharged at the end of the third week, union primary.

deeply in this way is really quite less than in the tying off piecemeal by the interrupted suture, as usually done.

There are cysts which, from changes of an inflammatory or other character, cannot be enucleated by the easy process of stripping the investing peritoneum with fingers. The experienced operator, however, will, by a painstaking dissection, usually succeed in saving the surrounding peritoneum. Fallopian tubes which have become pus sacs are often very troublesome in enucleation, but it can generally be effected without rupture and consequent danger from infection. Where the abdominal cavity is septic then drain, but not otherwise. Pelvic abscesses are obviously to be excluded from consideration by methods such as are under discussion.

It is equally important to advocate in this connection, the treatment of the remaining basic tissues in all cases of supra-pubic hysterectomy as well as the semi-solid tumors of the ovary, dermoid cysts, and cysts of the broad ligaments which are often found without a pedicle. Thanks to the labors of Apostoli, of Paris, it is a conceded fact that laparotomy for fibroid tumors of the uterus is considered less necessary than formerly. However, it cannot be doubted that a considerable number of cases are not amenable to treatment by electricity. Where the growth seriously imperils the life of the patient, and the surgical removal of the tumor is wisely taken into consideration, the importance of a pedicle consisting usually of the elongated cervical tissue is a marked factor in the problem, without which most surgeons decline operating. Nevertheless, it is frequently true that the uterine myoma, which fills the pelvic basin, interfering with the functions of its organs, thereby most often demands removal. When thus located, the cervical tissues rarely afford material for furnishing a pedicle, and the external treatment of the stump is impossible.

It is a well known histological fact that the growth of uterine myoma of necessity causes the formation of so-called capsular investment, developed from the surrounding uterine tissue. In rare instances, where the tumor is single, and the uterus has not become too greatly deformed, it may be removed from its capsule, and the uterine wall closed by suturing. The interstitial growths, however, usually develop from different centres and so alter the structure of the organ that the removal of the entire uterus is demanded. Under these conditions, the most available method of procedure consists in the division of the capsules and the enucleation of the growths, controlling hæmorrhage by pressure forceps. After the size of the organ is thus reduced, the remaining portion is put on tension, and the base is sewed evenly through, as near the junction of the peritoneal reflection from the bladder and rectum as is judged advisable, and the redundant tissue is cut away. These are divided by a V-shaped incision, so as to allow the easy coaptation of the peritoneal investment by a sero-serous continued suture, in the same manner, as advised in the treatment of non-pedunculated cysts. If the condition of the cervical canal seems to demand it, it should be treated by a drop of liquid crystals of carbolic acid, a strong sublimate solution, or the mucous membrane may be cored out by the knife.

When the condition of the growth will allow, it is a great convenience to first push down over the tumor the so-called rubber-dam which is constricted at its base by an elastic ligature. This simple procedure, suggested to me by the common practice of the dentist, encircling the base of the tooth while filling, oftentimes saves the loss of much blood and proves an exceedingly convenient protection to the abdominal organs. When hysterectomy is thus performed, hæmorrhage is under far better control than by the strong ligature which constricts to necrose the tissue. The pressure upon the parts enclosed is even and continuous, the sutures are speedily covered by a fresh deposit of lymph, and open wound surfaces are entirely avoided. Strain and pressure upon the bladder and rectum are minimized and generally entirely wanting. The abdominal wound is completely closed, rendering drainage not alone unnecessary, but superfluous, and when the abdominal wound is properly sealed with iodoform collodion, subsequent infection is impossible.

There can be little doubt that the advantages of this method are many, and yet they are all based upon the fundamental principles of antiseptic surgery. Without a mastery of these principles and a familiarity with their application and religious exactitude in carrying them out, these operations should never be undertaken. The buried animal suture, unless introduced aseptically, thus hidden away in the remote recesses of the body, is sure to be attended with most disastrous results. But when itself, *aseptic* and *aseptically* applied in an *aseptic* wound, it becomes one of the most important factors in modern surgery, the value of which is as yet greatly underestimated and scarcely properly understood.

JACCOUD'S NUTRITIVE ENEMA.

An enema of great nutritive power, and valuable in cases of cancer of the stomach, closure of œsophagus, etc., is produced by M. Jaccoud, as follows:

℞. Beef broth (freshly made) 8 ounces.
Wine, 4 ounces.
Yolks of eggs, 2.
Dry peptone, 1 to 4 drachms.
℔. Sig.—Mix and make an enema to be injected in small portions at intervals during the day.

NASAL REFLEXES.

Read before the American Rhinological Association, Louisville, October, 1890.

BY A. B. THRASHER, M.D.,
OF CINCINNATI, O.

There is perhaps no department of modern rhinology more interesting to the specialist or more prolific in material than "nasal reflexes." Indeed, so fertile has been the field that much opprobrium has fallen to our lot by the great diversity of diseases and multiplicity of symptoms which we have attributed to this cause. It does not seem at all strange to the surgeon that *morbus coxarius* should attract our attention by pain in the knee-joint; but he is skeptical when we refer a post-auricular neuralgia to a hypertrophic turbinate. For a thorough understanding of these neuroses we are perhaps more indebted to Hack, of Freiburg, than to any other one man. His monograph[1] on the subject referred to cases of asthma, nightmare, cough, migraine, sneezing, neuralgias, swelling and redness of the skin of the nose, etc., which he had for the most part successfully treated by cauterizing the erectile bodies of the anterior extremities of the lower turbinates.

In 1872 Voltolini[2] reported a case of reflex asthma due to the irritation caused by a nasal polyp, and cured by the removal of the growth. Since then numerous cases of asthma have been reported as due to nasal disease, and a large per cent. of asthmatics are now cured by the rhinologist. In 1882 Dr. Carl Seiler,[3] of Philadelphia, reports two cases of reflex cough arising from intra-nasal lesions. In the same volume of the "Archives" Dr. Wm. H. Daly, of Pittsburgh, reports cases of hay fever as caused by intra-nasal disease. His observations have been corroborated by Dr. Jno. O. Roe, of Rochester, and since by a host of others both in America and abroad. The same year Hack reports[4] a number of nasal reflexes. The next year John Noland Mackenzie, of Baltimore,[5] advances the theory that there are in the nose certain sensitive areas, located more especially over the posterior extremities of the inferior and middle turbinates and the adjacent portion of the septum, which, when subjected to disease or irritation, give rise to the so-called nasal reflexes. Dr. Mackenzie's able paper excited no little attention, and while his conclusions have been somewhat modified, yet they served as an excellent means of directing the rhinologist to a more careful examination into this interesting subject. The same year Dr. Elsberg[6] mentioned many nasal reflexes, some of which appear to be only remotely connected with the local lesion. Baratoux[7] says that in a certain number of cases cough and sneezing can be caused by irritating the posterior part of the septum, and he attributes certain reflexes to the pressure on this part of the swollen turbinate or a polyp. Dr. Cartaz[8] describes an interesting case of epileptoid convulsions produced by touching an ulcer located on the posterior extremity of a hypertrophied lower turbinate.

Hering, of Warsaw,[9] describes numerous cases of nasal reflexes. He gives prominence to the pressure of the middle turbinate against the septum, or to the irritation of the middle turbinate by inflammation, by inspissated secretions, or by the pressure of a polyp. Mr. Lennox Browne,[10] under the heading of neuroses of the larynx, mentions a case of epileptiform convulsions which he attributes, and I think quite properly, to intra-nasal irritation. Bosworth[11] mentions two cases of salivation as due to intra-nasal disease, both in elderly people, and in both cases local treatment was successful.

Gruening,[12] of New York, reports cases of ocular trouble as due to disease of nose, and similar observations have been made by Cheatham, of Louisville,[13] and by Bettman, of Chicago.[14] Lennox Browne[15] reports a case of glaucoma cured by the removal of a nasal polyp.

These cases and symptoms might be repeated almost without limit, but I will conclude with two examples of reflex salivation, which have recently fallen under my observation.

Case 1.—Mr. M., æt. 68, musician, nervous temperament, some symptoms of paralysis agitans. Was referred to me July 24, 1890, by Prof. Forcheimer, for obstinate salivation, which had been present since an attack of the "grip" three months before. There was a chronic naso-pharyngitis without marked hypertrophy. The turbinated corpora cavernosa of both nares were engorged and hyperæsthetic, and the pharynx and buccal cavity were filled with an aqueous secretion. The saliva could be seen dripping from Stenson's and Wharton's ducts, and its presence was a serious inconvenience to the patient and of great detriment to his business. The reduction of the local hyperæsthesia was followed by a cessation of the salivary flow.

Case 2.—Mr. N., æt. 51, referred to me by Dr. Ashburn, of Batavia, O., for excessive salivation. He had been subjected to a severe bodily shock five weeks before, since which time his nervous system had been seriously disordered. For four weeks the salivary flow had been so great as to produce marked discomfort. In this case there was present chronic hypertrophy of both lower turbinates, now accompanied by excessive hyperæsthesia. Dr. Ashburn agreed with me in thinking that we had to deal with a reflex salivation from intra-nasal disease, precipitated by the nervous shock lately received. The patient's general condition was so bad that he was unable to undergo any local treatment other than palliative, and I am unable to report the result.

Among the affections which have been attributed to intra-nasal disease or irritation may be

mentioned: asthma; hay fever; cough; spasm of glottis; gastralgia; dyspepsia; tumefaction and redness of nose; œdema of conjunctiva; conjunctivitis; photophobia; epiphora; asthenopia; glaucoma; scotoma; salivation; cardiac palpitation; disorders of smell, taste, hearing and sight; huskiness of voice and aphonia; exophthalmic goitre; rheumatic pains; vertigo; chorea; epilepsy; melancholia; agoraphobia; aprosexia; neurasthenia; migraine; cephalalgia; neuralgias; nocturnal enuresis; many uterine disorders; affections of the genito-urinary mucous membrane, etc. The very number of these reflexes is so great that care must be exercised to prevent mistakes.

Dr. Bosworth has very properly[16] eliminated such of these affections as are probably produced in some other manner than by reflex action. For example, some neuralgias may be caused by pressure on a nerve trunk of engorged tissues and vessels. A conjunctivitis may arise from an extension of inflammation by continuity of tissue through the nasal duct.

As specialists we must carefully examine the nose; but as physicians we must look still further in our search for the often obscure *causus morbi*. We must not let our zeal as specialists overcome our judgment as physicians.

But the reflex being admitted, and the local origin being some intra-nasal lesion, what, let us inquire, produces the reflex?

Hack seems to believe that the vaso-motor paresis of the anterior turbinates, as a rule, causes the irritation which gives rise to the reflex. John N. Mackenzie thinks that the trouble is due to an implication of the nervous ganglia or nerve centres, and that this involvement may be due to frequent irritation of the intra-nasal nerves or to some other impairment of the nervous system, or to a neurotic dyscrasia plus the local intra-nasal irritation.

There must be a nervous temperament, a diseased condition of the nerve centres, and then a local intra-nasal lesion. Dr. Mackenzie's reasoning on this subject is so logical, and his conclusions so just, that I at least endorse his idea of duality in these neuroses, even if I cannot wholly accept the trinity.

That the first irritation of a previously healthy nose in a person whose nervous centres were normal would produce a reflex disturbance I very much doubt. But when this nerve shock has been experienced repeatedly, then it is easy to believe that there might be some impairment of the nervous ganglia because of their over-stimulation. That this abnormal condition of the central nervous ganglia may be more easily produced in a person of nervous temperament, either hereditary or acquired, I can readily believe; and that it may be produced by extra-nasal causes seems to me also possible.

In Case 2, as related above, the patient gave a history of chronic rhinitis extending over a long period before any reflex symptoms were noticed. Then came the nervous shock, and from extra-nasal causes there was produced the pathological condition of the central nervous system. Then did the intra-nasal irritation call forth a reflex, and then only because of the abnormal excitability of the central ganglia which had been precipitated by other causes.

The engorgement of the erectile bodies from vaso-motor paresis differs essentially from that of true inflammation.

Dr. W. C. Glasgow, of St. Louis,[17] very clearly directs attention to the swelling of the cavernous bodies in some cases without the ordinary symptoms of an inflammatory process. In these cases he has noticed "great swelling of the cavernous bodies, abnormal paleness of the mucous membrane, and profuse discharge of the limpid fluid." There is not increased redness nor an increased supply of normal blood, as would be the case in congestion or inflammation. This condition of vaso-motor paresis is frequently present in the cases of nasal reflexes; but if it is always present it is sometimes masked by active inflammation, so that we see only the ordinary symptoms of congestion and inflammation.

A mechanical, chemical, or thermal irritant may produce this disturbance of the vaso-motors and the engorgement of the erectile bodies. Every local irritation is conveyed by the afferent nerves to the central ganglia and reflected by the efferent to the point of sensation. The repetition of this irritation beyond a certain point, varying in accordance with the condition of the ganglion cells, produces an over-excitable condition of the central ganglia, so that a less and less amount of peripheral irritation is required to produce reflex phenomena. This nervous irritation may become constant and the accompanying reflex be continuous.

One cannot always be positive that a certain symptom is due to a reflex nasal neurosis. Hack has pointed out a test to determine the reflex character of an affection. This is made by applying cocaine to the erectile bodies of the nose, and when fully anæsthetized the reflex phenomena should be abolished. This, however, has not proven a certain test, as many true nasal neuroses are not much affected by the local use of cocaine. Usually the reflex phenomena can be either excited or exaggerated by touching the sensitive area of the nose with a probe, but this is not always true. There will always remain a certain number of cases in which the phenomena are supposed to be produced by intra-nasal irritation, but where it will require the removal of all nasal abnormalities before a positive diagnosis can be made.

There appears to be but little connection between the severity of the reflex symptoms and

the amount of intra-nasal affection. Very little trouble in the nose may give rise to reflex phenomena of great magnitude, and *vice versa*. This fact has many times led to a mistaken diagnosis, as the nares have been pronounced normal when there was present a sufficient amount of inflammation or irritation to give rise to severe reflex trouble. Nor does it by any means follow, when we have to deal with a cough or a supra-orbital neuralgia in a patient presenting marked hyperæsthesia and disease of the nasal mucosa, that the cough or neuralgia is reflex and produced by the evident intra-nasal lesion. The cough may be due to laryngitis and the neuralgia to malaria, and there may be no connection with the nasal disease. Many a nose has been sprayed and burned and cut, and all in vain, for the relief of a symptom which had no connection with the nose. A hypertrophic turbinate does not always give rise to serious trouble, and it is not always necessary to straighten a crooked septum, or cut off a small cartilaginous septal spur.

Since it is probable that the cause of these reflex phenomena may be found in the nose and in a dyscrasia, it is well to direct our efforts at cure in two directions, viz.: to rid our patient of the intra-nasal disease, and at the same time to give attention to the underlying dyscrasia. However skeptical we may be as to the good effects of drugs, we would hardly dare to treat a patient manifestly a subject of lues without mercury and iodide of potash. And if a patient has a periodical supraorbital neuralgia, with an enlarged spleen and a well-marked cachexia, we would not content ourselves with cauterizing the turbinates, however large and inflamed they might be, but would at the same time administer the bark and arsenic and iron to meet the indications for constitutional medication.

The character of the constitutional dyscrasia will determine the constitutional treatment. Just so of the local treatment. Whether a septal spur is removed by a snare, or saw, or drill, or galvano-cautery, so that in the end it is well removed, makes but little difference. Treat the local disease so as to remove it as rapidly as possible, with as little resulting damage to the intra-nasal mucosa.

In these reflex disturbances it becomes apparent that the specialist should be broad in his ideas, not viewing the whole world through his nasal speculum, or not expecting to see the cause of all bodily ailments reflected in his rhinoscope.

[1] Ueber eine Operative Radical-Behandlung bestimmter Formen von Migraine, Asthma, Heufieber, etc., 1884.
[2] Die Anwendung der Galvano-Kanstik, Vienna, 1872.
[3] Archives of Laryngology, Vol. iii.
[4] Berliner Klinische Wochenschrift, 1882, No. 25.
[5] Amer. Jour. of Med. Sciences, July, 1883.
[6] Transactions A. L. A., 1883.
[7] Revue Mensuelle de Laryngologie, December, 1885.
[8] France Médicale, Vol. ii, 1885.
[9] Annales des Maladies de l'Oreille, du Larynx, etc., 1886.
[10] Diseases of Nose and Throat, p. 487.
[11] Diseases of Nose and Throat, Vol. i.

AN EASY AND SIMPLE METHOD OF PREPARING MACROSCOPICAL SPECIMENS OF THE EYE.

Read in the Section of Ophthalmology at the Forty-First Annual Meeting of the American Medical Association, Nashville, Tenn., May, 1890.

BY J. H. THOMPSON, M.D.,
OF KANSAS CITY, MO.

At many of the large clinics both at home and abroad a quantity of valuable pathological material is wasted because there has been no easy or simple way to preserve it. This is particularly true in ophthalmic institutions, where the attendants are not usually experts in pathological technique or are too busy to attend to the details necessary for a proper mounting of a specimen. If it were not that preparations of the diseased eye are often very valuable the excuse "want of time" would be acceptable, but the result of a little time and work in this line is often so gratifying, that I feel justified in calling your attention to the method I pursued in the preparation of this specimen. Perhaps it is unfortunate that in the hardening process much time is consumed which cannot be avoided, but the technique is easy and can be acquired by following closely the method herein advised. When the eye is removed wash it in cold water, wrap it in a piece of paper and freeze it hard by inserting it in a box of cracked ice and salt. It should remain not less than an half hour in the freezing mixture, remove it, and quickly with a sharp knife or flat razor cut off two sections, one should extend from the cornea to the equator of the eye opening the anterior and vitreous chamber but should avoid injuring the lens if possible. It is only necessary to open the anterior chamber in one place so that the hardening fluids may easily pass in, the other section, much larger than the first, should be cut from opposite surface of the eye and should extend from the edge of the cornea to the posterior pole of the eye on a plane corresponding to the horizontal visual plane and parallel to the optic axis. If the eye is well frozen this can be done without crushing the organ or disturbing the relation of the internal structures, but the lower cut must be so even, that when the eye rests upon a flat surface the scleral edge is in contact all round. The object is that being thus placed upon a piece of glass, when the vitreous fluid melts it will be retained within a scleral cup and hold the internal membranes and structures exactly as they were before the eye was opened. Of course it may be necessary to make the openings at other places to avoid cutting away the bases of tumors or certain diseased parts, but

[12] New York Medical Record, 1886.
[13] Amer. Practitioner and News, 1887.
[14] Jour. of Amer. Med. Assoc., 1887.
[15] Op. cit.
[16] Op. cit.
[17] Trans. A. L. A., 1885.

wherever made they should be as near opposite as possible.

Have ready a glass quart jar half filled with Müller's fluid, and a watch glass, which has glued to it with parafine four long threads, place the frozen specimen flat on the center of the glass and holding the whole horizontal by suspending it by the threads, lower it into the hardening fluid and fix it an inch or so from the bottom of the jar. I usually use a cork stopper and by passing the threads through a hole in the centre can lower or elevate the specimen without disturbing it. The specimen should remain in Müller's fluid at least six weeks, which should be changed four times. At the end of that time it is ready for alcohol. Remove the eye from the bichromate of potash solution and wash it in a large quantity of water, being careful that during the washing process it is not injured. It is then placed in dilute alcohol twenty-four hours, 90° spirit four hours, and finally absolute alcohol, where it should remain until it is certainly dehydrated: twelve hours is sufficient time. From the alcohol it is transferred to a bottle of turpentine where it should stay until the turpentine has penetrated freely all the tissues, especially the sclerotic coat. It will do so in twenty-four hours, when the specimen has a transparent amber look.

Wherever turpentine will go melted paraffine will follow and inasmuch as we desire to paraffinize the specimen it is only necessary to keep it in melted paraffine long enough. Ordinarily paraffine melts at about 135°, so if the preparation is kept in an oven at that temperature or on a water bath it will suffice, but it is difficult to hold the temperature between 140° and 150° without a thermostat, consequently many men have neither the time nor the patience to carry out that part of the process. In the winter season the steam radiators in our office buildings have a temperature ranging from 130-150 degrees, so if the bottle containing the paraffine is placed on one of these the work can be done without watching and without danger of overheating. Place the bottle holding the eye and an ounce or so of turpentine in a temperature ranging from 130-150°. I usually put the bulb of the thermometer in the fluid and keep it there; from time to time put in pieces of the hardest purest paraffine; by pouring off the fluid, a few drams at the time and adding paraffine to make up the loss, the spirits of turpentine will be finally eliminated when the specimen will be saturated with melted paraffine in which it should remain at least two days. If the temperature should go down and the whole solidify, no harm is done, it can easily be remelted. Some advice to remove the specimen from turpentine directly into melted paraffine. In the eye it will not do, since the heat drives off the spirit from the scleral coat when the parafine will not thoroughly penetrate, which renders the specimen useless.

The specimen is now ready for the cast. Make a strong paper cylinder one and one-fourth inch in diameter and two inches long, put an ordinary prescription paper on a flat surface, and pour some of the parafine upon it, enough to cover a space larger than the base of the cylinder; remove the eye from the bottle and quickly place it flat in the centre of the paraffine disc on the paper; it will stick; then cover it with the paper cylinder which should not touch the specimen but should be pressed down into the hardening mass. Fill the mould full with the paraffine from the bottle and let it stand until it is hard. The cast in ordinary weather will not be thoroughly hardened inside of six hours.

If the cast is put in the clamp of a microtome very thin slices can be cut off, but since the best part of the specimen is one-third of an inch or more from the upper surface it is well to carefully pare away the cast either with a very sharp knife or better by working the instrument until the desired part is reached, resharpen the knife and make a section about one five-hundredths of an inch thick. To prevent the section curling some instruments have fixed to the knife a flattener, but an ordinary business card held edgewise on the section as it is cut will keep it flat. If the specimen is properly prepared the cast will be solid and contain no air bubbles, so when a thin slice is cut off of it, it will be without a break and hold a perfect section of the eye.

Procure from a photographer some old negatives, clean them and cut them into slices four inches long by one and one-half inches wide; have on hand some cover glasses one-hundredth inch thick, two by one one-fourth inches square; make a fixer of collodion and camphor chloral two parts to one. With a camel's-hair brush paint the collodion mixture on the slide over a space larger than the section, which should be then carefully laid upon it and covered with a piece of paraffine paper; it may then be pressed flat with the ball of the thumb. I usually flatten with an ordinary knitting needle; remove the paper, place the slide on a heated surface about 140°, until the paraffine begins to melt and the fixer turns opaque. The section is thus glued fast to the glass slide, so when the slide is put in a bottle of turpentine the paraffine is dissolved away nothing remains but the anatomical tissues. The slide may remain in turpentine indefinitely. From turpentine transfer to alcohol in sufficient quantity to dissolve out the turpentine, then to distilled water in which it may be stained by any of the ordinary aqueous stains. I prefer logwood stains for that purpose. When sufficiently colored the specimen is dehydrated in spirits and absolute alcohol, clarified with the oil of clover or spirits of turpentine, and mounted permanently in Canada balsam.

This process, called the paraffine imbedding,

has been extensively used by Dr. Reeves, of Chattanooga, but it has not been recommended in eye work, the celloidion having been considered the best. I have not succeeded with that method so well as I have with the one advised, and I believe that if you will follow the plan suggested in this paper, especially as regards the freezing and hardening process you will succeed by mounting some beautiful and valuable specimens.

CASE OF SARCOMA OF THE CHOROID —OPERATION—NO RECURRENCE IN NEARLY THREE YEARS.

Read in the Section of Ophthalmology at the Forty-first Annual Meeting of the American Medical Association, held at Nashville, Tenn., May, 1890.

BY A. G. SINCLAIR, M.D.,

PROFESSOR OF DISEASES OF THE EYE, EAR, AND THROAT IN THE MEMPHIS HOSPITAL MEDICAL COLLEGE; SURGEON IN CHARGE OF THE EYE AND EAR DEPARTMENT OF ST. JOSEPH'S HOSPITAL, MEMPHIS, TENN.

Malignant intra-ocular growths are of so much importance that every case of the kind should be placed on record, and especially the results of treatment, whether favorable or otherwise, in order that we may learn at what stage of development the disease passes beyond the control of remedial measures. I therefore beg to occupy your time briefly with a report of the following case:

In June, 1887, I was consulted by Mrs. K., 40 years of age, who reported that three years previously she had lost the sight of her right eye while suffering from symptoms which, according to her description, were very like those of acute glaucoma, and that the organ had continued more or less irritable up to the time of presentation. On examination I found vision extinct; conjunctiva moderately injected; pupil somewhat dilated, and motionless; iris discolored; lens cataractous; tension plus 1; pain in the eye, forehead and temple. Although suspecting the presence of an intra-ocular growth, I determined, as my patient was a lady, and cosmetic effects were therefore not to be ignored, before proceeding to enucleation to test the power of iridectomy to overcome the glaucomatous symptoms above enumerated—knowing that if an intra-ocular tumor were indeed present they would soon reappear and render positive the indication for removal of the eyeball.

I performed the operation accordingly, and relief of several weeks' duration followed. The symptoms then recurred in all their former intensity, and on August 14 I enucleated the eye under etherization. Entire relief from all symptoms followed; the patient made a good recovery from the operation, and soon regained her strength and spirits, previously much depressed by her sufferings.

I sent the eye, hardened in alcohol, to th laboratory of the College of Physicians and Surgeons, New York, for examination, whence I received in due time the following report:

NEW YORK, November 23, 1887.

Dr. Sinclair, Memphis, Tenn.

Dear Doctor:—The microscopical examination of the eye sent to the laboratory is as follows:

Cornea.—The cuboidal cells of the anterior epithelium are distorted and separated from each other by larger and smaller irregular shaped spaces (probably due to drying in the air). There are also a number of spindle-shaped cells among the cells of the anterior epithelium. At the sclero-corneal junction there are a few scattered pus cells. Lying against the posterior epithelium of the cornea is a layer of spheroidal cells.

Uveal Tract.—Iris is swollen and ciliary bodies flattened on both sides. The choroid just behind one of the ciliary bodies contains a mass of small spindle-shaped cells about 5–7 mm. in diameter.

Retina and Opticus.—Rods and cones absent from retina and there is an increased amount of interstitial tissue. In places the retina is changed to a connective tissue lamina. The optic disc shows a moderate degree of excavation.

Anatomical Diagnosis.—Small spindle-celled sarcoma of the choroid, interstitial retinitis, optic excavation, circumscribed purulent keratitis. Very respectfully yours, IRA VAN GIESON.

Nearly three years have elapsed since the operation; the patient continues in vigorous health, and there is no sign of a recurrence of the disease.[1]

54 Madison street.

A VEST POCKET OPHTHALMOSCOPE CASE.

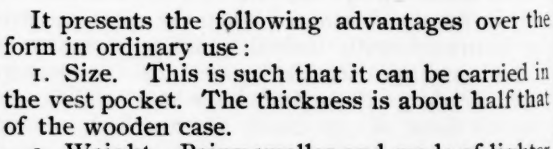
Read in the Section of Ophthalmology at the Forty-first Annual Meeting of the American Medical Association, held at Nashville, Tenn., May, 1890.

BY FRANK TRESTER SMITH, A.M., M.D.,

OF CHATTANOOGA, TENN.

LATE ASSISTANT SURGEON, NEW YORK OPHTHALMIC AND AURAL INSTITUTE.

I present to the Section an ophthalmoscope case made for me by Meyrowitz Bros. in 1886, and which I have had in constant use ever since. It is made like a spectacle case, the open end being closed with a tightly fitting lid, or like a flattened pencil case such as is used by school-children. It is made of stiff pasteboard, or other light material, covered with morocco.



It presents the following advantages over the form in ordinary use:

1. Size. This is such that it can be carried in the vest pocket. The thickness is about half that of the wooden case.

2. Weight. Being smaller and made of lighter material, it is not as heavy as the ordinary form.

3. Shape. There are no corners and the edges are rounded off.

[1] There is still (Dec., 1890) no sign of a relapse.

4. As a result of the shape we have another advantage: It is dust-proof. The lenses are consequently more easily kept clean.

5. As a further result of the shape we have the advantage of greater durability. The hinges of the ordinary case are soon worn out.

6. It is never necessary to remove the handle from the instrument.

7. The ophthalmoscope can be kept in the case at all times except when in actual use. During office hours it takes too much time to be continually taking the instrument from the case with a lid. By removing the lid the ophthalmoscope can be placed in the case and taken from it more easily than from the vest pocket. The weight of the ophthalmoscope will prevent its falling out of the pocket in stooping.

I use the Knapp ophthalmoscope. The instrument with a tilting mirror would require a thicker case. There is no place in this case for an accessory lens. I find it more conventent to carry this in an eye-glass case in my vest pocket.

THE TORSION OF ARTERIES FOR THE ARREST OF HÆMORRHAGE.

Read at the Sixteenth Annual Meeting of the Mississippi Valley Medical Association, at Louisville, Oct. 9, 1890.

BY J. B. MURDOCH, M.D.,
OF PITTSBURGH, PA.

There is no subject of greater interest to the practical surgeon than the arrest of hæmorrhage. This remark is equally true whether the hæmorrhage comes from a wound accidentally inflicted, or one made intentionally, by the surgeon's knife.

Without the means of stopping the flow of blood from bleeding vessels, the surgeon's art would be greatly crippled, and surgical operations, where blood-vessels must be divided, would be impossible.

There is no sight so appalling as a formidable hæmorrhage. When a large artery is opened, the blood gushes out in an angry stream, the face becomes pale, the color leaves the lips, the respiration becomes sighing, the heart fails to beat, and death closes the scene. Without any knowledge of the circulation or nature of the blood, or of the means by which its flow from a wound could be arrested, what a terrible and mysterious sight it must have been to the early races of men to see one of their number perish from hæmorrhage. What, for instance, must have been the sensation of our first parent Adam, as he looked upon the wounds of his dead son Abel, with the stain of his blood upon the ground. Surgeons from the earliest ages have shared this dread of hæmorrhage, and have ever been striving for the best means of its control.

Upon no subject has our profession been more conservative than upon this one—the arrest of arterial hæmorrhage. Since the time of Celsus, notwithstanding the numerous methods which have been proposed for this purpose, but two, viz.: the actual cautery and the ligature, have received the endorsement of the profession. But, if the profession has been slow to endorse new methods, its confidence once gained has been most unwillingly surrendered.

From the time of Archigenes, who practiced in Rome shortly after the time of Celsus, up to the time of Richard Wiseman, Sergeant-Surgeon to King Charles II, the red-hot iron was the sole method employed. Thus this method of checking hæmorrhage after amputation not two centuries ago, was the same as that used for fifteen hundred years previous. The pertinacity with which surgeons adhered to the use of the actual cautery after Paré's great discovery of the ligature, well illustrates the fear in which surgeons stood of hæmorrhage. They had used, and had seen their fathers use, the red-hot iron, and, notwithstanding the pain it caused and the interference with primary union, they were unwilling to discard the agent which long usage had taught them was successful.

In 1564, Ambrose Paré published his new discovery, which, to use his own language, "was taught him by the special favor of the sacred Deity." In this publication, as is well known, Paré demonstrated the value of the ligature as a hæmostatic. But, owing to the extreme fear of hæmorrhage, and the criminal neglect of surgeons, it was two hundred years before it was adopted by the profession, and then it came into favor through the influence of Sharpe, one of the surgeons of Guy's Hospital, London, who boldly championed the claims of the ligature to popular confidence.

Since this time nothing has dislodged the position which the ligature has held as a hæmostatic in the opinion of the profession.

The efforts made by Sir James Y. Simpson, of Edinburgh, to substitute acupressure, and the still more recent endeavor of Dr. S. F. Spier, of Brooklyn, to substitute constriction for ligation have most signally failed. The same statement may be made also in regard to torsion as a means of arresting arterial hæmorrhage. It has not received the support of the profession to any great extent, but unlike the other rivals of the ligature, it has had champions for hundreds of years, and still holds a place as a valuable means of arresting hæmorrhage. This subject has received but little attention by modern surgeons. The twisting of an artery to arrest bleeding is of ancient origin. It is spoken of by Celsus. A fact often observed that an arm or leg may be torn from the body with the loss of only a few drops of blood, no doubt suggested the method. It has been advocated by such surgeons as Amussat, Dieffenbach, Schroeder and Syme. But the credit of

bringing it prominently before the profession and establishing its efficiency is due to Mr. Bryant, the present distinguished surgeon of Guy's Hospital, London. At this hospital the ligature is seldom used, torsion being chiefly relied upon. Mr. Bryant tells us in the last edition of his "Surgery," that in two hundred consecutive amputations of the thigh, leg, arm and forearm, all of the arteries were twisted, one hundred and ten of them being the femoral artery, and that in no case was there secondary hæmorrhage.

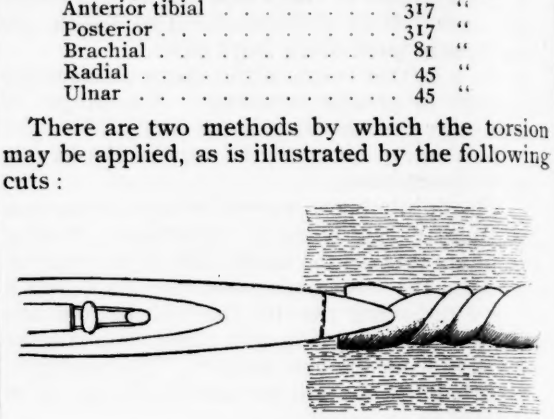
Mr. Bryant says: "The physiological arguments in favor of torsion are very great, and the practical advantages seem to be no less. After seven years' experience in its practice, applied to vessels of all sizes, the femoral being the largest, I have had no mishap. I have observed that wounds have united more rapidly and kindly, primary union being the rule. There has been less constitutional disturbance after operation, and consequently, less liability to traumatic fever, pyæmia, and other complications such as we are all too familiar with in the practice of surgery. I have had stumps heal in a week, and the patient up in two weeks; without one single drawback, rapid and uninterrupted convalescence following the operation."

Having given this experience of Mr. Bryant, I desire now to give my own as observed at the Western Pennsylvania Hospital of Pittsburgh. At this hospital, torsion is almost exclusively relied upon to check the hæmorrage from wounded arteries or veins, whether the wound be produced by the surgeon's knife or otherwise. My experience with torsion as a hæmostatic, dates back to the year 1872, when I became a member of the hospital staff. My colleagues had, previous to my connection with the hospital staff, been twisting arteries as large as the radial and ulnar. The facility with which this was done and the fact that the wounds healed kindly and without secondary hæmorrhage, induced me to follow their example, at first timidly, but with success came confidence. Having been successful in the amputation of a forearm with no untoward result, I ventured next to twist the brachial artery after the amputation of an arm; soon after this the axillary, and then the popliteal, and finally the femoral. And now, for the past eighteen years, torsion, for the arrest of hæmorrhage after all surgical operations, has been the recognized, and almost the only method resorted to at this hospital. It is to be regretted that records have not been kept of the number of larger arteries which have been twisted to arrest hæmorrhage.

The following is a table showing the number of arteries divided in cases of amputation where torsion has been resorted to for the arrest of hæmorrhage at the Western Pennsylvania Hospital:

Femoral	116 times.
Popliteal	18 "
Axillary	18 times.
Anterior tibial	317 "
Posterior	317 "
Brachial	81 "
Radial	45 "
Ulnar	45 "

There are two methods by which the torsion may be applied, as is illustrated by the following cuts:



FREE TORSION.

LIMITED TORSION.

1st. Limited torsion; and
2nd. Free torsion.

In the first method, two pairs of forceps are required. The first pair grasps the vessel at its cut extremity, and pulls it from the sheath. It is then seized by the second pair at a point from one-half an inch to an inch above the cut extremity of the artery; this second pair being held at right angles to the long axis of the vessel. The first pair is then given three or four sharp turns.

By the second method (free torsion), only one pair of forceps is required. It is the one recommended by Mr. Bryant as not being so likely to injure the external coat of the artery. And this is the method which was adopted in the cases which I have given.

A good pair of forceps is required which will hold the end of the artery firmly, and that has no lateral motion, and with serrations blunt enough to obviate any laceration or cutting of the parts seized by the blades. The vessel should then be drawn out as in the application of the ligature, and three or four sharp rotations of the forceps made. In large arteries, such as the femoral, the rotation should be repeated till the sense of resistance has ceased. The ends should not be twisted off. In small arteries the number

of rotations is of no importance, and their ends may be twisted off or not, as may be preferred. In all of the cases mentioned in the above table torsion of the arteries and veins was the method resorted to to control hæmorrhage.

In addition to these cases, of which we have a record, the method of torsion has been the one resorted to in all other surgical operations performed during this period, such as amputations of the female breast, the removal of tumors, the excision of joints, etc. It is within bounds to say that torsion has been resorted to at this hospital in thousands of cases without any mishap. We have had no case of secondary hæmorrhage which could fairly be attributed to the method of controlling the hæmorrhage.

The advantages of torsion as compared with ligation are:

1. The greater facility with which it can be applied.

I am fully aware that this proposition is disputed, but to those who are familiar with both methods, there can be no doubt that torsion is the easier of the two. For the ligation of an artery, an assistant is required to seize the vessel and draw it out while the ligature is applied. For torsion, the surgeon requires no assistant. The vessel must be seized by the forceps in either case. In torsion it only requires three or four turns of the forceps to complete the process, which can be accomplished in as many seconds. When a ligature is applied, let the operator be ever so skilful, the thread may break or slip off the vessel, but if neither of these accidents occur, the process cannot be accomplished in anything like the same time.

2. Torsion is a safer method, being less liable to be followed by secondary hæmorrhage.

This proposition has been absolutely proven by the experience in the use of torsion at Guy's Hospital, London, and I have now given additional proof by the experience given in this paper.

3. Healing is facilitated because the wound is free from any irritating or foreign body.

This proposition is so plain that it should not require an argument. It was true before the antiseptic treatment of wounds had come into such general use, but it is doubly so now. The catgut ligature is no doubt a safer ligature than the silk, for it does not require an ulcerative process for its discharge, and when this ligature has been made thoroughly antiseptic, it is no doubt the best. But a ligature rendered thoroughly antiseptic is not always at hand, and those surgeons who have had most experience with the antiseptic treatment of wounds, will, I think, be the first to admit that, in spite of their most careful attention, septic germs are often introduced into the wounds by means of the ligature. Even after every precaution in preparation and preservation, the handling of a ligature in its application is a frequent source of infection.

But there are other objections to its use. The catgut ligature may dissolve before the artery has become closed by the natural hæmostatic process, or it may unbind. Both of these accidents have been the frequent cause of secondary hæmorrhage.

On a recent visit to some of the principal hospitals in New York City, where the operators and assistants possessed the greatest skill, I was not surprised to see that in many instances a ligature broke, or in other cases slipped off the vessels before they were secured. This was to me exceedingly annoying to witness, when I knew that the vessels could have been so easily twisted while they were in the grasp of the forceps. When the question was asked one of these operators, a distinguished surgeon, "Why don't you resort to torsion?" the reply was, "We are afraid to trust it." This answer might have been given with equal force by Richard Wiseman in the seventeenth century, when asked why he did not resort to the ligature instead of the red-hot iron.

In a matter so important as the arrest of arterial hæmorrhage, it is proper that surgeons should be conservative, but there is such a thing as pushing conservatism too far. In the torsion of arteries, I claim we have an improvement upon ligation; its claims for recognition rest upon physicological arguments, which cannot be shaken, and its reliability as a hæmostatic has been proven by abundant experience.

MEDICAL PROGRESS.

BIOLOGICAL EXAMINATION OF DRINKING-WATER.—MIGULA (*Centralblatt für Bakteriologie und Parasitenkunde*) has come to the conclusion that the number of colonies that are developed in plate cultures, is not an index of the potability of waters examined by this method. He finds, however, that there is a relation in the number of species found in water and its purity. If a large number of varieties are present it speaks generally for the unhealthfulness of the water. We must refer the reader for fuller particulars to the original and the tables which accompany it, representing as they do, over 400 examinations.

He closes with the following conclusions: first, that the number of colonies developed by 1 ccm. furnishes no ground for concluding as to the potability of such waters; second, the bacteria of decomposition are absent from running water; third, the bacteria of decomposition are most numerous in water containing 1,000 to 10,000 germs in each cubic centimeter, though they may be present when the number is as low as fifty, and

they are less frequent when more than 10,000 germs are present; fourth, bacteria of decomposition are only found when several species are present. The relation of number of colonies to number of species is very indefinite.

NEW METHOD OF STAINING RED BLOOD CORPUSCLES.—MIHAJLORITZ (*Centralblatt für Physiologie*) recently called attention to a new method of staining blood corpuscles. He refers to the process of Biondi, in which the blood is mixed with osmic acid and agar-agar and subsequently cut into sections, which may be treated like sections of other tissues. This method is considered by the writer to require too much time, and to be troublesome. He claims to have reached equally good results by staining the blood directly upon a glass slide and subsequently washing in absolute alcohol, clearing with oil of cloves and Canada balsam. The success of the method lies in removing the outer layers so that only a single layer of corpuscles is attached to the glass. This is accomplished by gently passing the finger or a camel's hair pencil over the surface of the clot—the lower layers are left owing to their stronger adhesion to the surface of the glass.

PASSAGE OF TUBERCLE BACILLI THROUGH THE INTESTINAL CANAL.—Some interesting experiments have lately been made by ZAGARI on dogs fed with tubercular food. These are interesting from two points of view. First, that our knowledge of the action of the digestive juices on the tubercle bacillus is small; and secondly, that tubercular processes as affecting the dog have been little studied. Dogs were fed on sputum which had been proved to contain large numbers of tubercle bacilli. After the course of from ten to twenty hours the bacilli were detected by means of the usual color tests in the fæces, and continued to occur for two or three days, occasionally five or six days, after the tuberculous material had been removed from their food. The dogs continued healthy and entirely free from signs of tuberculosis, although the sputum was mixed with their food for some time, and meat known to be tuberculous was also given. Experiments were now made to endeavor to ascertain what substances in the digestive tract prevented the growth of the bacilli. The bacilli found in the fæces were shown by inoculation on other animals to be virulent. It was also demonstrated that washings from the stomach also contained active germs. Although the food was allowed to remain in the stomach for three or four hours before being washed out, yet the organisms were not entirely destroyed. After six hours' stay in the stomach inoculations on guinea-pigs still produced tuberculosis, but their action was delayed. After from seven to nine hours a local infection only was the result, and after from eighteen to twenty hours no effects at all were noticed. An interesting point in connection with these results is that the gastric juice of a dog contains a higher percentage of acid than in man. As the analysis of the contents of the stomach did not explain why the dogs did not become tubercular, the further course of the bacilli was next investigated. It was shown that the bacilli found their way out of the intestinal canal into the tissues, for the blood of the dogs was proved to be infectious—that is to say, produced tuberculosis when inoculated; the same effect was produced by the lymph from the thoracic duct; also by portions of the liver, when introduced into the peritoneal cavity of a guinea-pig. When portions of the tissues were examined microscopically the result was negative. A few bacilli, however, were found in the spleen. When young dogs were fed with sputum they died, not of tuberculosis, but of a form of "intoxication." Further researches on dogs were then made with pure cultures of tubercle bacilli. When inoculated under the skin a local affection was the result, which usually ran a favorable course. When the injection was made into the pleura a local pleurisy and tubercular disease of the lung were produced which proved fatal. When intravenous injections were tried the results were again negative. The bacilli obtained from the fæces as described above, although virulent, had lost some of their vitality. Pure cultures exposed to a temperature of 55° C. for eight days were not destroyed, whilst the bacilli from the fæces were killed after an exposure of five days. Again, if these bacilli were dried, after from sixty to ninety days they were no longer infectious, whilst Ichill and Fischer have shown that bacilli in pure cultures retain their virulency for a far longer period than this.—*The Lancet.*

A CASE OF TUBERCULAR INOCULATION.—T. DEUKE (*Deut. Med. Wochenschr.*) reports the case of a seven months child of a phthisical mother, that fell and injured its head against a chamber vessel containing some bloody sputum of the mother. The clean cut wound was disinfected and healed rapidly. The cicatrix later began to enlarge, and shortly swelling appeared in the region of the parotid, with suppuration and enlargement of the neighboring glands. This suppuration finally caused the death of the child. In the pus of the part, the tubercle bacillus was found abundantly.

TYPHOID BACILLUS IN DRINKING-WATER.—KARLINSKI (*Archiv. für Hygiene*) has recently made some observations upon the life of the typhoid bacillus, under approximately normal conditions. For the experiments an old cistern with imperfect walls was chosen. The first observations after the addition of 1,900 cubic centimetres of the dejections of a typhoid patient showed an

enormous number of germs containing some twelve different species, including some infusoria. On the third day all of the typhoid bacilli had disappeared. This observation was repeated several times, varying the amount of fæces that were added, but always with a like result. The cistern was then carefully cleaned and filled with pure spring water, in which the writer observed the typhoid bacilli twelve days after they had been added. An explanation for the rapid disappearance of the typhoid bacilli, the writer finds in the speedy development of a large saprophytic germ that destroys them.

THE PHYSIOLOGY AND PATHOLOGY OF SLEEP; WITH OBSERVATIONS ON NONA.—MAUTHNER (*Intern. klin. Rundschau*, 1890, 949), in discussing the various pathological processes whose most prominent symptom is sleep accompanied by extreme muscle-weakness, divides these into those of a more chronic or subacute course, and those of a very stormy acute form. In the first category belong:

1. The "endemic morbid somnolence of the negroes," which is followed by death in the course of two to three months. The symptoms are general apathy and depression, the most extreme muscular weakness without motor paralysis and with intact sensibility, a staggering gait, and constantly increasing somnolence until the power of motion is entirely lost, and the motionless sleep lasts until the fatal end.

2. "Gayet's disease," as illustrated in the case described by Gayet in 1875, the symptoms, course and termination of which possess a close resemblance to the "maladie du sommeil," and which is of especial importance in that an autopsy was obtained.

3. "Gerlier's disease," occurring in the form of small endemics in Switzerland, and described by Gerlier under the name of "*vertige paralysant.*" The symptom of somnolence is less prominent in this affection than are the vertigo and extreme muscular weakness, rendering young, powerful stable-men unfit for any labor.

4. The "*attaque du sommeil*" of hysterical persons, the duration of which may be several months without ending fatally.

All of these more chronic forms—with the exception of the tropical form, of which the author has no certain knowledge in this respect—have a striking focal symptom in common; viz., ptosis with paralysis of the ocular muscles.

The acute forms are represented by the following:

1. "Wernicke's disease," whose symptoms are, from the beginning, a combination of ocular paralysis, staggering gait, and somnolence, or else a final stage of somnolence, after preceding agitation.

2. Unusually long sleep after intoxication, in which the individual may sleep—as in one case under the author's observation—as long as five days, during which time it is impossible to wake him.

3. "Nona," in case this disease actually exists. The possibility of the existence of this affection cannot be denied, since morbus Wernicke, occurring epidemically or endemically, would end in death the third or fourth week, with somnolence as its most prominent symptom.

The nature of both the chronic and the acute forms of morbid somnolence is undoubtedly that of a *poliencephalitis superior*. The inflammation of the central gray cavities of the third ventricle, the gray matter of the walls of the aqueduct of Sylvius, and that of the floor of the fourth ventricle, give as the most constant general symptoms, general apathy and depression, with excessive muscular weakness, and, in a more advanced stage of the disease, extreme somnolence; while as a result of the extension of the process to the nuclei of the nerves, the focal symptom of ocular paralysis appears.

Basing his opinion on clinical experience and on the pathological appearance in disease of the central gray cavities, the author proposes a theory for the cause of physiological sleep. This theory is, that sleep is to be considered as an evidence of tiring of the central gray cavities. Through the temporary suspension of the function of this portion of the brain, both the centripetal and the centrifugal nervous paths communicating with the cortex are cut off. Consequently sensory impressions are not conducted to consciousness, although the sensory organs on the one hand, and the cells of the cerebral cortex on the other, have not suspended their function. In the same way the motor centres are normally innervated in dreams, but on account of the interruption in the conduction in the central gray cavities, no motion is produced in spite of the normal power of conduction of the peripheral nerves. Finally the focal symptom of ocular paralysis is not absent; for the falling of the eyelids in those becoming sleepy is a true ptosis, while the simultaneous occurrence of double vision indicates the marked disturbance of innervation of the external ocular muscles.—*American Journal Medical Sciences.*

HERPETIC ANGINA.—Under this title BERTILO (*St. Petersburger Med. Wochenschr.*) describes an interesting case of a man who presented himself at the city hospital at Riga. At first he was treated for an ulcer at the base of the tongue, which caused severe pain. As he was markedly emaciated and presented tubercle bacilli in the sputum the ulcer was thought to be tubercular, notwithstanding that the patient had had syphilis some years before. While under treatment a crop of irregularly placed vesicles, with cloudy contents,

presented themselves on the posterior wall of the pharynx. Later these vesicles disappeared leaving an ulcer which was slow to heal. Subsequent crops of vesicles appeared upon the base of the tongue, fauces and walls of the pharynx, these were accompanied by vesicles at the margin of the lips and in one case on the glans penis. The patient finally recovered and was discharged about one month after the beginning of the trouble. The author makes this case a text for a discussion of some of the theories regarding the identity of herpes of the skin and throat.

PERSISTENCE OF THE TYPHOID BACILLUS IN THE BODY.—CHAUTEMESSE (*Semaine Médicale*) reports a case of typhoid fever with so many relapses that the duration may be said to have extended over five months. Orloff has published a case in which a pure culture of the typhoid bacillus was obtained from an osteo-myelitic abscess, nine months after the beginning of the affection. Achalme has reported a similar case. The writer observes that these cases are rare, but that they teach the possibility of prolonged infection in typhoid. He calls attention to the fact that abscess in this disease is usually caused by the various forms of suppurative bacteria (secondary mixed infection, ref.).

In the discussion Rendu reported a case with three relapses and a duration of three months. Netter, one with a duration of six months and six relapses. In this last case an abscess developed that contained only suppurative bacteria.

AN IMPROVED METHOD OF LAVAGE.—A very simple improvement in the apparatus for washing out the stomach, a procedure often of great value in the treatment of gastric disorders in childhood, has been described by DR. W. BEATTIE NESBITT in the *Archives of Pediatrics*, September, 1890. The fluid is obtained as usual from a siphon bottle placed above the level of the child, but the india-rubber tube from this bottle is connected with the stomach catheter, not by a piece of straight glass tubing, but by a glass tube shaped like a widely open tuning fork; the handle of the tuning fork is connected with the stomach catheter, one limb with the tube from the bottle, and the other with a waste tube conducted into a suitable receptacle. It is convenient to have the tube from the bottle and the catheter of red rubber, and the waste tube of black rubber. The tubes from the two limbs are placed over the forefinger of the right hand, and are held loosely in the palm; either can then be easily compressed by the thumb. When it is desired to fill the stomach, the catheter having been introduced, the waste tube is compressed, and the fluid readily flows into the stomach from the bottle; when the stomach is to be emptied the red or siphon tube is compressed, and the black released. If the eye of the catheter becomes blocked, as often occurs, the current is easily reversed by compressing the black and releasing the red tube. Dr. Nesbitt recommends the use of a mouth gag, and, after inserting the tube, places the child on its side, with the face slightly downward. Before removing the catheter the stomach is filled quite full. An act of vomiting generally follows the withdrawal of the tube, or if not may be excited by titillating the fauces. "In this way," writes Dr. Nesbitt, "I have often seen removed large pieces of coagulated putrid casein, half an inch to an inch in length, of such a tough leathery consistence that no amount of washing would have broken them up."—*British Medical Journal.*

CASTRATION IN OSTEO-MALACIO.—E. TRUZZI reported to the International Congress (*Beilage zum Centralbatt für Gynakologie*) two cases in which the operation was done, followed by recovery. The first case was that of a woman 26 years old who during her first pregnancy, had ostitic pains, but the confinement was spontaneous. The next labor was more difficult and a third was induced before term. After this last both ovaries were removed, which was followed by marked improvement of the osteo-malacio. A second case was that of a woman 34 years of age with osteo-malacio of three years standing, the result in this case was a suspension of the pathological process. From these two cases the author argues that the operation in some way affects the general nutrition favorably, in puerperal as well as non-puerperal cases.

Fehling, of Basel (*ibidem*) contributed a paper in which he reported a prompt recovery in eight cases of osteo-malacio in which the uterus and ovaries had been removed after Porro's method. He thought the relation of the operation to the bone disease was shown by the fact that at menstruation the trouble was always worse; the immediate lessening of pain after operation, and the evident marked effect of pregnancy upon the process. Nasse has demonstrated a loss of substance in the bones of the pelvis and it was possible that we might have in these cases, a vaso-motor reflex from the genital organs.

TREATMENT OF IN-GROWING TOE-NAIL.—PURCKHAUER (*Münich Med. Wochenschr.*) recommends the following method which he has tried not only on himself but numerous patients. The offending portion of the nail is painted with 40 per cent. solution of hydrate of potassium, which rapidly softens the outer layers, soon reducing them to the consistence of butter, after which they are scraped away. The proceeding is again repeated until the nail is reduced to the thickness of paper, when it may be removed from its bed and cut away with scissors.

THE
Journal of the American Medical Association
PUBLISHED WEEKLY.

SUBSCRIPTION PRICE, INCLUDING POSTAGE.

PER ANNUM, IN ADVANCE.....$5.00
SINGLE COPIES.....10 CENTS.

Subscription may begin at any time. The safest mode of remittance is by postal or express money order, drawn to the order of THE JOURNAL. When neither is accessible, remittances may be made at the risk of the publishers, by forwarding in REGISTERED letters.

Address
JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION,
No. 68 WABASH AVE.,
CHICAGO, ILLINOIS.

All members of the Association should send their Annual *Dues* to the *Treasurer*, Richard J. Dunglison, M.D., Lock Box 1274, Philadelphia, Pa.

LONDON OFFICE, 57 AND 59 LUDGATE HILL.

SATURDAY, NOVEMBER 8, 1890.

THE MEDICAL STUDY OF CRIMINALS.

The medical reports of physicians connected with jails, prisons, asylums and alms houses, are generally confined to a few statistics and dispensary-like reports, that have little intrinsic value to science. To-day the prison physician finds a new continent suddenly opening before him, of the medical study of crime and the criminal. His services as dispensary physician are insignificant compared with the possible facts and discoveries within his grasp.

The publication of the second volume of LOMBROSO'S great work on criminals, and the papers and discussions of the Second International Congress of Criminal Anthropology at Paris last year, has suddenly given the prison physician prominence. To-day he occupies the most enviable position for original work, in solving some of the great questions of mental science and sociology. Criminality has a distinct symptomology and pathology; crime has a biological factor, and the criminal has an anatomical, physiological, and psychological nature. The legal treatment of this class has failed, and as a consequence, the level of criminality is rising throughout the civilized world. In France, England, Germany, Spain and the United States, the tide of criminality is rising rapidly. In this country the number of criminals in twenty years have increased one-third more than the increase of the population.

It is evident that the treatment of criminals must be from a different standpoint; that crime must be studied scientifically, and the criminal known physiologically and anthropologically. This Lombroso's works attempts, and a little volumn on "The Criminal," published in the *Contemporary Science Series*, gives a very excellent summary.

In this work criminal symptomology is described. In the study of the external physical symptoms distinct cranial and cerebral characteristics are seen. While the average size of the heads differed but little from ordinary people, there was lack of symmetry, and defective development. In the face, a large prominent lower maxillary bone, or a thin retreating jaw was noted in most cases. High cheek bones, large coarse ears, pallid skin, precocious wrinkles that are common to old age; anamolies of the hair; and a physiognomy that is difficult to describe, in which the eye is most prominent, were also noted. In large numbers of criminals there is very striking similarity of appearance. In heredity some remarkable facts appear. In all cases there is an innate predisposition, and an element of contagion from the surroundings. Motor activity in all cases was prominent, and physical insensibility was below the normal in most cases, hence punishment by pain has less influence on the criminal. The eye and its functions were found superior to the average man, while the hearing and sense of smell were below the average. Early use of tobacco, great sensitiveness to climatic changes, vaso-motor insensibility appeared common. Moral insensibility and palsy of all the higher brain forces, suggesting an arrested development, and reversion of type, with moral instability, and want of foresight, seemed present in all cases. This is ascribed to physical insensibility and defects of normal functioning. In intelligence the average criminal is stupid, inexact, lacking in forethought, and strangely imprudent; he is also cunning, hypocritical, loving falsehood and intrigue. Vanity is also very prominent, and emotional instability, and sentiment, and even tenderness and religious emotion are associated with instructive criminality. A literature, language, and philosophy have grown up with this class. The author goes back to the beginning of crime and the conditions which favored its growth, such as environment, nutrition, culture, contagion and other causes. He discovers crime

among children, and women, crime as a profession and its relation to epilepsy, and insanity, and reaches some very suggestive conclusions.

Criminals, like the insane, the idiot, and epileptic, are the results of natural causes and reversionary types, the roots of which go further back than any acquired disease. Like insanity criminality follows civilization, and cannot evidently be reached by any one plan of treatment. The experiment at Elmira, New York, of the training of youthful criminals, opened up a new vein, and suggests possibilities of medical treatment that is startling. It also suggests that prison physicians and others who come in contact with criminals, may from a scientific study, be able to point out the forces and laws which govern crime and the criminal, and adopt measures of treatment that will neutralize this rising tide of crime which threatens the civilization of to-day. One fact is established beyond question, viz.: our present theories of crime and criminals must be abandoned. The advances of scientific knowledge in the realm of physiology and psychology, sociology, and anthropology, contradict and give no support to the present views.

A few great pioneer students, like Lombroso, and other distinguished physicians of Europe, have gone into this new land of science, and we ask, where are the American physicians with equal facilities and equal enthusiasm? Here is an open field, beyond all rivalry, with the possibility of discoveries that will help on the march of the race, with more certainty than the knowledge of the *poles*.

THE RELATION OF SYPHILIS TO PARETIC DEMENTIA.

This subject was recently discussed in the Congress for Mental Diseases, held in Rouen in August last.[1]

DELAPORTE opened the discussion by stating the diverse views held upon this subject, and the necessity of having a special table of causes, for all cases of general paralysis. Also, a second table of the number of syphilitics found among those affected with other forms of insanity.

DUBUISSON, of Quatremare, had noticed a large increase in the number of paralytics, which he attributed to the increased consumption of alcohol. Out of 1,600 paretics, in only fifty could syphilis be determined. He ranged the causes of paretic dementia, according to their frequency, in the following order: alcoholism, heredity, overwork, syphilis, and traumatism.

REGNIER, of Paris, claimed to have demonstrated that there were two distinct diseases, one known as pseudo-paralysis (FOURNIER) and the other as true dementia, dependent upon causes competent to produce other forms of mental disease. The frequency of syphilis in the antecedents of general paralytics is very variable, according to MENDEL 76 per cent. REGIS, in 318 cases, found a like percentage. On the other hand, CHRISTIAN places the number at only 15 per cent.

RÉGIS, of Bordeaux, said that during the past year he had seen twenty-one paralytics, eighteen of whom were syphilitic, one doubtful, and two non-syphilitic. He especially called attention to the fact that manifestations of syphilis were rare among paralytics, and that many of them might marry and beget healthy children. It was the marks of old disorders that were to be looked for.

CULLERRE, of Roche sur Yon, placed the percentage of syphilitics at 13. He did not think that general paralysis of syphilitic origin had distinct clinical characters, but it was most refractory to specific treatment.

VOISIN, of Paris, said certain restrictions should be placed upon the figures of Régis and Cullerre. They assumed too readily the intervention of syphilis. Out of 560 general paralytics he had found but nine presenting undoubted signs of tertiary syphilis. The symptoms of cerebral tertiary syphilis had distinct characteristics and could be distinguished from the ordinary forms of paralytic dementia.

RIST, of Versailles, said it was impossible to reconcile the statistics of Régis and Voisin. The one had found eighteen syphilitics in twenty-one cases of general paralysis, and the other but nine in 540. This was only to be explained by a very different manner of diagnosticating syphilis.

The discussion, with an unimportant addition, was closed at this point, leaving the question of the etiological relation of syphilis in general paralysis, in the position that it has been for many years; and showing the necessity of more accurate clinical study of the subject.

[1] La Semaine Médicale.

SOURCES OF CAFFEINE.

It is said that nearly all the caffeine now made is obtained from tea. For years past it has been asserted, and commonly accepted as the fact, that this alkaloid was identical with that derived from either coffee, cocoa, Paraguay tea, guarana or kola. Latterly, however, this opinion has been unsettled, since the separate study of the alkaloids, derived from these different sources, has shown that a marked difference in the therapeutic effects of some of them can be demonstrated. The production of palpitations of the heart, a peculiarity of theine, may be accounted for in that class of cases that have greatly puzzled some recent observers, when the fact becomes known to them that the tea plant has been substituted for the coffee-berry, as a source of their caffeine. A recent paper by DR. T. CRANSTOUN CHARLES, in the *British Medical Journal*, contains an interesting study of the physiological effects of maté, or Paraguay, tea and its alkaloid, which is also called caffeine, but which seems to be antidotal to the symptoms produced by chronic overdosage with theine. He reports two cases, elderly women, who having been great tea-drinkers, had become troubled with sleeplessness, constipation and headache, and whose condition had been continuously changing for the worse, in recent months; he prescribed the maté tea. After taking it for a week, these patients reported marked improvement; the constipated habit had been broken up, and their bowels had become regular without resort to cathartic drugs, in consequence, as is held by Dr. Charles, of the property possessed by maté, of exciting the peristaltic action of the intestines; and more urine was excreted, while the insomnia and headaches were far less frequent. These good effects still continue, after a nearly continuous exhibition of the maté for more than a year. Dr. Charles adds that seven other persons have found maté serviceable for the relief of headache and constipation, and with whom both tea and coffee had seemed to disagree.

EDITORIAL NOTES.

THE AMERICAN ACADEMY OF MEDICINE will hold its Annual Meeting at Philadelphia, Wednesday and Thursday, December 3 and 4, 1890. Richard J. Dunglison, Secretary.

CINCINNATI AUTHORITIES AND CIGARETTE SMOKING.—The chief of police in that city has issued orders to arrest all children found smoking and will hold them in custody until they learn from whom the goods were obtained.

A PHYSICIAN CREMATED.—The body of Dr. A. B. Carpenter, a prominent physician of Cleveland, O., was incinerated at the Buffalo Crematory, October 21.

A NEW MEDICAL JOURNAL.—*The Baltimore Medical and Surgical Record* is the title of a new medical monthly, the first number of which was issued in October. Its purpose is to furnish, at a low price, a monthly review of medical literature, and as the second medical journal in the State of Maryland, will seek especially to serve the profession in that State. The initial number gives promise of a periodical highly creditable to the Editor and valuable to the profession.

KEMMLER'S DEATH INSTANTANEOUS.—Under this heading, the *Chicago Tribune* of October 26 gives a somewhat extended statement from which we quote the following facts: When William Kemmler was executed by electricity in the State's Prison at Auburn, N. Y., last July, Dr. George E. Fell, of Buffalo, one of the attending physicians in charge, took occasion to obtain and preserve some specimens of the executed man's blood for microscopical examination and analysis. The blood, the most important fluid of the body, is, as is well known, affected by any important changes in the system, and the execution afforded an opportunity never before obtainable of ascertaining the effects of a fatal electric shock. These specimens were given to Henry L. Tolman, a well known microscopist of Chicago, to be photographed. The slides thus mounted and photographed are specially interesting—revealing the fact that with blood corpuscles taken from points along the track affected by the electrical current are shrunken to one-third of their normal diameters, have adherent tendencies, and in multitudes of instances are literally shattered. The blood taken after death from the lower extremities was perfectly natural in appearance, indicating that, rapid as is the circulation of the blood, electricity is still more instant in its execution.

THE CONNECTICUT MEDICAL SOCIETY is making preparations to observe its centennial anniver-

sary in 1892. Dr. Gordon W. Russell, of Hartford, has been invited to prepare a medical history of the Colony and State previous to 1792, and Dr. Francis Bacon, of New Haven, is to write the history subsequent to that date.

THE INSANE HOSPITAL AT BLOCKLY.—The sum of $150,000 had been appropriated for new buildings in connection with this institution. The Committee on Charities of Philadelphia now recommend an additional appropriation of $75,000 for their completion.

THE AMERICAN PUBLIC HEALTH ASSOCIATION.—The eighteenth annual meeting of this Association will be held at Charleston, S. C., December 16, 17, 18 and 19, 1890. The President is Dr. Henry B. Baker, of Michigan; Dr. Joseph H. Raymond, of Brooklyn, N. Y., is Secretary; Dr. H. B. Hoelbeck is Chairman of the Committee of Arrangements. The subjects selected for consideration at that meeting will be as follows: "House Architecture;" "Heating, Lighting, Drainage and Ventilation;" "Sewage Disposal;" "Marine Sanitation;" "Control of Tuberculosis;" "Isolation Hospitals;" "Establishments in favorable Climates for persons predisposed to Tuberculosis;" "Schools for Children;" "Sanatoria;" "Permanent Residences," etc.

THE NEW TARIFF AND MEDICAL BOOKS.—Under the new tariff law foreign medical books printed in any other language than English are admitted without the payment of duty.

THE NEW YORK STATE MEDICAL ASSOCIATION held its annual meeting in Mott Memorial Hall, in New York, October 22, 23 and 24, and was in every way a success. The President's Address is presented to our readers in the present number of THE JOURNAL, and an outline report of its work will also be found under the head of "Society Proceedings."

SMOOTH SAILING.—The *Medical Record* is led to infer from a hypochondriacal statement made by the *North American Practitioner*, that "the World's Fair matters are not moving altogether smoothly in Chicago." We beg to inform the *Record* and its numerous readers that nothing could be more a matter of fancy and less a matter of fact. It was certainly the dictate of wisdom, on the part of the management, that every precaution should be taken, and that every question of sanitation in connection with the Columbian Exposition should be most carefully considered. Good counsellors were selected and their advice accepted. The site is selected, the work is in progress, all matters are moving on smoothly and the management, in the confidence of a grand success, is happy.

TRI-STATE MEDICAL ASSOCIATION.—At the annual meeting of the Tri-State Medical Association the following were elected as officers for 1891: President, Dr. Robert Battey, Rome, Ga.; First Vice-President, Dr. E. T. Camp, Gadsden, Ala.; Second Vice-President, Dr. Richard Douglas, Nashville, Tenn.; Third Vice-President, Dr. D. H. Howell, Atlanta, Ga.; Secretary, Dr. Frank Trester Smith, Chattanooga, Tenn.; Treasurer, Dr. B. S. Wert, Chattanooga, Tenn. On motion the Association adjourned to meet in Chattanooga, Tenn. (date to be decided on), 1891.

PUBLIC MEDICAL LIBRARY IN KALAMAZOO, MICH.—Dr. E. H. Van Deusen, formerly Superintendent of the Michigan Asylum for the Insane at Kalamazoo, but at present retired from active practice, has recently donated to the city of Kalamazoo the sum of $50,000 for the purpose of the erection of a public library building.

DR. W. S. CHRISTOPHER, of Cincinnati, has been called to fill the Chair of Practice of Medicine, and Clinical Medicine, of the University of Michigan, Ann Arbor.

THE SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION will hold its next Annual Meeting at Atlanta, Ga., November 11, 12, and 13, 1890. A general invitation has been extended to members of the medical profession to be present at its sessions, and a very general response is anticipated. George J. Engelmann, M.D., of St. Louis, Mo., is President; W. E. B. Davis, M.D., of Birmingham, Ala., is Secretary, and Virgil O. Hardon, M.D., of Atlanta, Ga., is Chairman of the Committee of Arrangements. A full programme has been prepared, and we anticipate a most successful meeting.

COST OF INFLUENZA.—The cost to England of the influenza epidemic is estimated at $10,000,000; about one-half of this amount having been paid by insurance companies and friendly societies, and the remainder representing loss of wages and disorganization of business.

TOPICS OF THE WEEK.

A SUCCESSFUL EFFORT.

The effort to secure $100,000 for the purpose of inducing the Trustees of Johns Hopkins University to admit women to their future medical school, which was inaugurated six months ago, has been successful. The fund was formally tendered by Mrs. Henry Winter Davis, representing the subscribers, and accepted by the Trustees October 28. Much interest has been manifested throughout the country in the movement, and committees have been at work in the chief large cities in collecting contributions towards the fund. The matter has been pushed under the impression that if the fund were offered before the opening of the school it would be secured, whereas there might be difficulty later on. In consummating the agreement the Trustees, at the request of the ladies, passed a resolution accepting the fund and the conditions, viz.: that women whose previous training has been equivalent to the preliminary medical course prescribed for men shall be admitted upon the same terms as the latter. The fund is to be invested and known as the Woman's Medical School Fund, and with interest and additions, is to remain invested until, with its aid as a foundation, a general fund has been accumulated of not less than $500,000, "sufficient for the establishment and maintenance of a medical school worthy of the reputation of this University and fully sufficient as a means of complete medical instruction. Then, and not until then, will a medical school be opened, etc." The Board further declare that they are "satisfied that in hospital practice among women, in penal institutions in which women are prisoners, in charitable institutions in which women are cared for, and in private life when women are to be attended, there is a need and place for learned and capable women physicians, and that it is the business and duty of the Board, when it is supplied with the necessary means, to make provision in its proposed medical school for the training and full qualification of such women for the abundant work which awaits them in these wide fields of usefulness." Judging by the success in raising funds to tide the University over the financial embarrassments of 1888 and 1889, it is quite probable that this bid for general support in favor of one of the most popular movements of the day, by one of the most renowned and progressive of our American Universities, will meet with an early and liberal response.

THE MEDICAL LIFE, ITS OPPORTUNITIES AND DUTIES.

In his Presidential Address delivered before the University of Durham Medical Society, on October 10, and reported in the London *Lancet* of October 18, Prof. Thomas Oliver spoke upon this subject:

In the course of his address he referred to various reasons why the medical life should be devoted to study, and dealt with the aims which should guide the exercise of the study. The aim of each should be how best to discharge the duties of the profession so that life may be spared to others and happiness extended. Such an aim brings with it a larger heartedness and a truer nobility of character in the end. Speaking of the opportunities afforded to students at the present, he said: "It is our good fortune to enter upon life in the latter part of a century marked by great activity. We are heirs of the knowledge accumulated by our predecessors. The experimental method in medicine has widened our margin of observation. Nearly a century ago, Galvani, the Professor of Anatomy in the University of Bologna, discovered the phenomena of galvanism. His discovery proved eminently suggestive. To his contemporary, Volta, Professor of Physic in the University of Pavia, Galvani's experiments appealed with marvellous power. Volta set himself at once to investigate the sources of the electricity displayed in Galvani's experiments, approaching the subject from the physical rather than the physiological side, and succeeded in giving to science an apparatus by which current electricity is transmitted in a continuous direction, and he has thus supplied us with the means of increasing our knowledge of the nervo-muscular system. Twenty years after this Sir Charles Bell discovered the difference in function between the anterior and posterior roots of the spinal nerves. Magendie, Muller, Claud-Bernard, and Waller contributed their quota to what we know of the functions of the nervous system. It was a beautiful but a bold stroke, too, that of Helmholtz, which led him to determine the rapidity with which nervous action is transmitted through motor nerves. Armed with that increase of knowledge which bids for acts of greater daring, the brain itself has been attacked by physiologists and surgeons, during life, to ascertain the secrets hidden in its convolutions. And, if a larger comprehension of the nervous system has enabled us to solve many problems that had hitherto been regarded as obscure, in other departments the same advance is noteworthy. The discovery of the vaso-motor centres, and the high-class character of the work of Gaskell as regards the anatomy of the sympathetic system, deserve notice ere we pass to another branch in which considerable progress has been made. It would appear that we are on the eve of some great therapeutical discovery; for Koch has announced that he has discovered a cure for tubercle depending upon destruction of the bacillus. I can scarcely leave the subject of micro-organisms without alluding to the brilliant discoveries of Klein within the last few months. Klein, however, has shown that on the udders and teats of the cow were occasionally found sores, the discharge from which, finding its way into the milk, was probably the source of infection. His experiments have brought to light an interesting series of facts. We have seen that in the human subject diphtheria is mostly a local disease, and that in the cat it is also local, but with a special tendency for lung and kidney to become affected. When the same disease is induced in the cow it would seem as if the germs were diffused throughout the body, for they appear in the milk which is secreted, and here is a circumstance which strongly supports that statement. Two of the cats kept by Dr. Klein took diphtheria, the origin of which at first could not be traced; there was no history of any recent epidemic amongst the cats, and their iso-

lation prevented them being infected in the ordinary way. In the same institution were two cows ill with diphtheria, induced by inoculation. Dr. Klein had arranged that their milk was to be thrown away. One of the attendants, disregarding this order, fed the two cats with the affected milk, with the result of causing diphtheria in them; thus was transmitted a truly specific disease from one animal to another, in exactly the same way as it is transmitted from animal to man. Should men despise a position in life, be it what it may, which gives them the opportunities of acting, which obliges them to suffer, and yet gives them the chances of conquering? The child-like spirit of humility is ours that we may at first accept conditions placed upon us over which we have no control; and the spirit of unrest and mental dissatisfaction are ours that, finding ourselves in these circumstances, they become our field of battle, wherein we learn to labor and prevail. To this are your education and manhood tending. Lifted out of circumstances in life as you have been, it is only that you may find that increased knowledge and opportunity have vastly enhanced your responsibility." Dr. Oliver concluded with the following words: "There are two worlds for you to conquer—one, the world of physical suffering, the other of mental sorrow. Patient and resigned in one that you may transcend the mists and clouds oft created by the other, you will, in a calm and clearer atmosphere, not only find answers to some of the great problems of human life, but, with a soul disciplined by experience, aid others to solve the problem for themselves."

THE OLDEST FRENCH BOOK ON SURGERY.

Dr. Pagel of Berlin has found the oldest French work on surgery among the manuscripts of the Royal Library here, and is publishing it in the *Archiv für Klinische Chirurgie*. It was written in the beginning of the fourteenth century, and its author was Henri de Mondeville. He deals in great detail with all the measures necessary for the treatment of surgical cases, and gives exact instructions for the male and female attendants. Many of these instructions afford significant glimpses of domestic life nearly six centuries ago, not only in the palaces of princes, but also in the hovels of the working people and bondsmen. The author frequently intercalates rules for the guidance of the surgeon in his dealings with patients and their relatives. He instructs his professional brethren, for instance, how to wring their fees—"*salariam extorquere*"—from wealthy but ungrateful patients. Passages of this kind give a vivid idea of the social position of physicians and surgeons in that remote period; they also increase our knowledge of the superstitions of that time. Besides this, the work gives a pretty complete idea of the state of surgery in the fourteenth century. Its author was one of the most eminent surgeons of his time. After studying in Paris and Montpellier, especially under Jean Pitard, he became a professor of medicine and surgery. In 1301 he was appointed physician in ordinary to Philip IV of France, surnamed the Handsome, whom he accompanied to Flanders. He began the book in 1306, but his progress was slow, owing to the multiplicity of his professional engagements. A long delay was caused by the circumstance that he accompanied Philip's brother, Charles de Valois, as army surgeon, to Arras and England. Thus it happened that the book was still unfinished at the time the author died of lung disease, about the year 1318. Besides the Berlin manuscript, Dr. Pagel has used for his edition (the first ever published) three manuscripts belonging to the French National Library, which were lent to the Berlin Library by Leopold Delisle, the head librarian there, for this purpose.—*The Lancet.*

BACILLARY PARTNERSHIPS.

In the course of some experimental investigations on the relationship of microörganisms with diseased conditions, Drs. Cornil and Babés have discovered that a certain affinity exists between particular species. In other words, the development of special varieties may be facilitated, or the reverse, by the presence or preëxistence of certain other varieties. In this way the occasional complication of an existing infectious disease by a second is not the result of mere chance, but is governed by some still undefined conditions of environment. In other instances this association of two or more species of microorganisms is necessary to the evolution of the malady. This association is the rule in the infectious diseases of human beings, and it is often the secondary infection that determines the fatal issue. This partnership arrangement may take place between microbes belonging to more or less nearly related species, as in the case with the organisms of pneumonia and typhoid fever. Or there may be streptococci and bacilli together, as in diphtheria, or several varieties of streptococci, as in the infection of wounds. In fact, there is a large selection of these associations, some invariable, others frequent and a third category, in which the secondary infection is accidental. These facts may possibly throw some light on the rhythm and sequence of the symptoms in the infectious diseases.—*Med. Press.—Times and Register.*

THE INTERNATIONAL MEDICAL CONGRESS AT ROME IN 1893.

Dr. Guido Baccelli, President of the Accademia Medica of Rome, and Professor of Clinical Medicine at the Sapienza, took the chair at a recent meeting of the Società per il Bene Economico di Roma, to consider the means of ensuring the success of the International Medical Congress to be held three years hence in the Eternal City. Among the adjuncts to that Congress it was decided to form an International Exposition of Hygiene in connection with the Sanitary Department of the programme, and, with that object, to appeal to all the leading industrial and professional centres throughout the peninsula to contribute their best and latest additions to the "Armamentarium Hygienicum," so as to place Italy at as great an advantage as possible in the inevitable contrast between her own sanitary work and that of the other Powers represented on the occasion. Florence, which has hitherto led the van in hygienic progress in Italy, has already promised her energetic coöperation; and other cities, like Turin and Milan, are expected to do likewise. Concurrently with the Medical Congress, an International Exposition of the Industries of All Nations is also being organized, so that Rome will be the busy scene of quite a gathering of the peoples, on a scale she has not yet known since she ceased to be mistress of the world. The early summer months, May or the beginning of June, or the early autumn months, the latter half of September or the beginning of October, are likely to be those selected for the Medical Congress—all risk of malaria at either time being improbable.—*Lancet.*

PRACTICAL NOTES.

THEOBROMINE AND DIURETIN.

It will be remembered that early in the year Dr. Christian Gram, of Copenhagen, published some results of his experience of theobromine as a diuretic, and his conclusions that in diuretin, the sodio-theobromine salicylate, a salt had been obtained which was easily absorbed and strongly diuretic. Under the direction of Dr. Dujardin-Beaumetz, further observations have been made by Mme. K. Pomerantz, which, in the main, confirm the statements originally made by Gram. The results she has obtained are briefly as follows: 1. When given in doses of 15 grs. every two or three hours diuretin is a much stronger diuretic than caffeine; 2, when there is considerable cardiac degeneration it should be employed with some caution, especially when there is albuminuria; 3, under the influence of diuretin the force of the cardiac contractions is scarcely affected; 4, diuretin rapidly increases the quantity of urine passed, and the diuretic effect lasts twice or three times as long as that produced by caffeine; 5, the activity does not wear off readily as the patient becomes accustomed to the drug; 6, micturition is not rendered difficult or painful; and 7, diuretin has no action on the central nervous system. Both theobromine and diuretin give good results in cases of dropsy when diuresis is possible; but as the action appears to consist of direct stimulation of the renal epithelium, it is obvious that the activity of the drug is seriously interfered with in cases of advanced kidney disease.—*The Lancet.*

SALICYLIC ACID AND CREASOTE SOAP.

Salicylic acid, 5 parts.
Creasote, 2 parts.
Basic soap, 93 parts.

M. This soap has been found of great service in the treatment of lupus, psoriasis, seborrhœic eczema, parasitic sycosis, favus and tinea tonsurans.

—*Noveaux Rèmedes; Nat. Druggist.*

ALTERATIVE FOR TERTIARY SYPHILIS.

℞. Potasii iodid, ʒijss.
Syr. acidi hydriodic, ʒj.
Aquæ destillat, ʒiij.

M. S. ʒij thrice daily, in a wineglassful of rice water (to detect free iodine).

—*Gerhard.*

PHENACETIN IN TYPHOID FEVER.

According to *The Lancet*, "Dr. Sommer has used phenacetin with great success in the treatment of typhoid fever, thus confirming the favorable views of its action which have been expressed by Masius and others. The dose employed for adults was 4 grs., which was repeated from two to four times during the twenty-four hours. Children were given only half this dose. No less than sixty cases were treated in this way, with but one fatal case, about which it is noted that the patient was not subjected to phenacetin treatment until three weeks from the commencement of the attack. In no case were there any serious complications."

FOR ENLARGED PROSTATE WITH CYSTITIS.

℞. Ergotinæ.
Pil. hydrargyri pulv., āā ℈j.
Salolis, ʒiij.

M. et divide in partes æquales No. xx et in capsulas gelatinas dantur.

S. Take one capsule thrice a day.

—*Gerhard.*

FOR UTERINE HÆMORRHAGE.

℞. Ext. cannabis Indicæ, gr. viij.
Ext. ergotæ fl., ʒj.
Ext. hamamelis fl., ʒss.
Tinct. cinnamoni, ʒss.

M. S. ʒj every three hours.

—*Montgomery.*

TREATMENT OF SYPHILIS BY RECTAL INJECTIONS OF IODIDES.

According to the *Revue Générale de Clinique et de Thérapeutique*, the following formula may be used by the anus, whenever the stomach is disordered:

℞. Iodide of potassium, 15 grs.
Ext. of belladonna, ¼ gr.
Water, 4 ozs. ℥ij.

The solution must be warm, and is said to be well borne and effective.

TREATMENT OF SMALL-POX.

M. Galewouski, of Paris, reports that in the small-pox hospital at Brunn, in Austria, baths colored red with permanganate of potash are used for the treatment of small-pox. It is stated that after a short stay in the bath the temperature of the patient falls materially, his general health is improved, the pustules are resolved, and recovery sets in.—*Med. Press and Circular.*

CHLOROFORM WATER IN CROUP.

Dr. H. B. Bashere, in the *Medical Record*, states that in the treatment of false croup he has had excellent results from the use of chloroform water, which, in his judgment, is superior to chloral. From 5 to 10 minims of chloroform to an ounce of water and about ½ drachm of glycerine, of which mixture a teaspoonful is given every half hour during the attack and the following day less frequently, say every two hours, but during the evening every hour, according to the difficulty of breathing.

SOCIETY PROCEEDINGS.

Tri-State Medical Association.

Second Annual Meeting, held in Chattanooga, Tennessee, October 14, 15, and 16, 1890.

FIRST DAY—MORNING SESSION.

The Association met in Turner Hall, and was called to order by the President, Dr. J. B. Cowan, of Tullahoma, Tennessee, at 10 A.M. The first session was devoted to introductions, miscellaneous business, etc.

AFTERNOON SESSION.

DR. W. P. MCDONALD, of Hill City, Tennessee, contributed a paper entitled

REPORT OF A CASE OF CANCRUM ORIS OR GANGRENOUS STOMATITIS.

The patient, white, was 4 years of age. Dr. McDonald first saw the case on August 5. He found her with some fever, tongue coated brown, with red edges, surface more or less furrowed or full of cracks in the brown coat, her general appearance indicating a very low state of health. Her bowels were inclined to be too loose, and her abdomen seemed to be somewhat distended—tympanitic. With these symptoms he pronounced the case one of typho-malarial fever. He began treatment by giving a mercurial purge, followed by large doses of quinine and bismuth. This treatment was continued for two days, after which he ordered 10 drops of the syrup of iodide of iron after meals, also quinine and bismuth in small doses three or four times a day. This treatment was continued for about ten days, at the end of which time he found the patient had greatly improved.

Fourteen days after seeing the child for the first time, he was called to see the mother, whom he found with nearly the same symptoms as the child first presented. During his absence from the city, another physician had treated an older daughter, whom he supposed had been troubled with the same disease. The child was still improving except complaining of a sore throat. On examination he found several small ulcers on the right side of the mouth, with a general inflammatory appearance of the gums and whole mucous lining of that side of the buccal cavity, with some bleeding from around the teeth. The trouble at first seemed to yield to a wash of chlorate of potassium and creosote, but on the seventeenth day of illness, the inflammation increased rapidly, the whole cheek and side of the face appearing very much swollen, and the inside was fast becoming dark and gangrenous. August 24, a small dark spot about the size of a penny made its appearance externally, just at the right wing of the nose. This rapidly enlarged, involving the wing of the nose and in proportion the tissues on either side of the central spot, and on August 25, it had involved the right side of the nose up to the inner canthus of the eye, also the upper lip to the median line, and had spread rapidly on the cheek, reaching a point where the zygomatic muscles cross the superficial portion of the masseter. The teeth on this side became loose and dropped out, both above and below, indicating deep seated trouble, possibly involving the maxillary bone.

Careful investigation revealed a strumous diathesis existing in the family, but no history of tuberculosis could be ascertained.

According to good authorities cancrum oris more frequently occurs as a sequel of other diseases than *per se*. The statistics of Rilliet and Barthez show that out of 98 cases of this disease, 41 were following measles; 5 scarlet fever; 6 whooping cough; 9 intermittent fever; 9 typhoid fever, and 7 mercurial salivation.

To draw a conclusion in the case by these statistics and by watching the case closely from the start, Dr. McDonald asks, "Did this occur as the sequel of the typho-malarial fever which I diagnosed (remembering the poor state of health the child was in to begin with)? Or was it the result of mercurial salivation produced by the mercury given at the beginning and followed two days after by the syrup of the iodide of iron?"

DR. JAMES E. REEVES, of Chattanooga, said the case was evidently one of gangrene, which is almost necessarily fatal.

PRESIDENT COWAN asked if the character of the disease might not have changed. To which Dr. Reeves replied that there was nothing impossible in medicine, and the disease might have changed.

DR. E. T. CAMP, of Gadsden, Alabama, once saw a case similar to the one reported, which he pronounced gangrene oris, the whole of one cheek being destroyed. There was evidence of mercury having been taken in the early part of the illness of the patient. The case terminated fatally within a few days. The patient was 4 or 5 years old and of the lower class. He thought the gangrene was the result of mercurial poisoning which was administered during the early part of the illness.

DR. JAS. E. REEVES, of Chattanooga, then contributed a paper entitled

ON ALL SIDES A LEARNED DOCTOR.

The author introduced his subject by an earnest plea for higher medical education, stigmatizing cheap medical colleges, with no facilities for imparting instruction, as the greatest stumbling-blocks in the way of true progress. He next paid his attention to the present tendency to make one-sided physicians, and lamented that the department of gynecology was overrun with

cheap performers with the speculum, probe, dull curette, etc., and maintained that the specialist should build on the broad foundation of the general practitioner in order to reach professional eminence.

EVENING SESSION.

DR. ANDREW BOYD, of Scottsboro, Alabama, read a paper on

FRACTURE AT ELBOW JOINT,

and reported cases. He said after reduction there are but two methods of treatment of fracture at the elbow joint, viz., the extended or straight, and the flexed position. The author thinks the flexed position the better of the two, for the reason, 1, that in all cases surgeons fear anchylosis, and it is much better to have a flexed anchylosed arm than a straight one. The comparative use in each is apparent. 2. When splints have remained twenty-five to thirty days, the arm is atrophied and almost helpless; it is therefore easier to overcome the flexor muscles than the extensors, and a patient can extend an arm with more ease than he can flex it.

MR. SIDNEY B. WRIGHT, of Chattanooga, read a paper on

EXPERT TESTIMONY.

He drew the following conclusions: 1. That all the facts proved should be consistent with the hypothesis. 2. That the circumstances should be of a conclusive nature and tendency. 3. That the circumstances should, to a moral certainty, actually exclude every hypothesis but the one propounded to be proved. 4. That mere circumstantial evidence, unless the chain of circumstances is absolutely complete, ought in no case to be relied upon where direct and positive evidence, which might have been given, is withheld by the adverse party.

DR. W. G. BOGART, of Chattanooga, reported a *Case of Neurosis*.

DR. W. S. GAHAGAN, of Chattanooga, read a paper (by title) on *Neuralgia*.

(*To be concluded.*)

New York State Medical Association.

Seventh Annual Meeting, held at Mott Memorial Hall, New York, Oct. 22, 23 and 24.

DR. JOHN G. ORTON, OF BINGHAMTON, PRESIDENT, IN THE CHAIR.

FIRST DAY.

For President's Address see page 665.

Papers were read as follows: *Prognostics in Medicine*, by Dr. John Cronyn, of Erie County; *The Mimicry of Animal Tuberculosis in Vegetable Forms*, by Dr. E. F. Brush, of Westchester County, and a paper by Dr. A. Palmer Dudley, of New York, entitled *A New Method of Surgical Treatment in certain forms of Retro-Displacements of the Uterus, with Adhesions.* In the afternoon there was a discussion on *Intra-cranial Lesions*, in which Dr. Jas. J. Putnam, of Massachusetts, Dr. Chas. K. Mills, of Pennsylvania, Dr. Chas. Phelps, of New York, and others, participated.

The questions propounded referred to: What are the present means of localizing intra-cranial lesions? What is the nature of the chief intra-cranial lesions (hæmorrhages, abscesses, tumors), and how can they be discriminated? What are the indications and contra-indications of operative interference in cases of intra-cranial lesions? What are the best modes of operating in cases of intra-cranial lesions? What are the immediate and also the remote results of operative treatment in cases of intra-cranial lesions?

A most interesting feature of the session was a paper on *Hypnotism*, read by Dr. H. Ernest Schmidt. He defended and upheld hypnotism as a remedial agent of the greatest value to the physician, though in a limited sphere. To fortify his position Dr. Schmidt related three cases from his own practice, in which he claimed an absolute cure from hypnotic influences. The first case was that of a sixteen-year-old girl, who suffered with nervous diseases, for which she had been treated by twenty-three physicians without success. Seven applications of hypnotic treatment effected a cure. In a second case neuralgia was cured, and in a third chronic rheumatism yielded to the mysterious influence. Dr. Schmidt attempted no explanation of hypnotic phenomena. His paper excited great interest among the attending physicians.

Dr. John W. S. Gouley, of New York, discoursed upon *Retention of Urine from Prostatic Obstruction; its Nature, Diagnosis and Management.* His treatment of the subject was exhaustive, lucid, and well fortified with numerous cases, and the exhibition of various surgical devices. He was careful to avoid advocating any instrument of universal adaptation, but pointed out the salient features of each.

SECOND DAY.

The morning of the second day, which was very stormy, opened with the Address on Surgery, *The Ligature of Arteries*, by Dr. Stephen Smith, of New York, which was elegantly presented in choice phraseology. The next paper, on *Exophthalmic Goitre*, was read by Dr. E. D. Ferguson, of Troy, N. Y., who confined himself mainly to its therapeutics.

Dr. George E. Fell, of Buffalo, was bulletined to read a paper on *The Death Penalty; Does the Garrote or Hanging ever produce Instantaneous Unconsciousness?* but, much to the disappointment of the audience, was absent.

The discussion on Obstetrics was opened by

Dr. S. B. Wylie Macleod, and involved the following queries: How may the present prophylactic measures in obstetrics be more extended and applied? Is the present technique, in the management of labor and convalescence, in accordance with sound physiology? To what extent have the surgical means of the treatment of labor complications been successful, or should these complications and the process of repair have been more generally left to nature? What influence would a more advanced obstetrical science have on the biological and social condition of the race?

The participants, who appeared in person or sent their papers, were Drs. Ira B. Read, Henry D. Nicoll, Wm. McCollom, Joseph W. Stickler, Geo. T. Harrison, T. J. McGillicuddy, A. Palmer Dudley, Wm. H. Robb, and Alfred L. Carroll.

At the night session Dr. Carlton C. Frederick, of Buffalo, delivered his address on Obstetrics, which touched upon the substantial advances of the year and claimed the attention of the audience until the reading of a paper by Judge Charles H. Truax on *The Medicine of the Classics*, which was replete with wit and humorous allusions.

THIRD DAY.

The morning session of the third day began with a paper by Dr. Martin Cavana, of Oneida, *On Expert Medical Testimony; or the Physician as a Witness.*

Dr. Benjamin M. Ricketts, of Cincinnati, O., an honorary fellow of the Association, read a paper entitled, *Some Observations on Bone and Skin Grafting*. He said: "Grafting, or dermepenthesis in the vegetable kingdom, has been developed to such an extent that there is hardly any limit to what may be done in the way of repair and production, beauty and financial gain being the greatest desiderata. While the results of grafting animal tissue are less gratifying than those of vegetable tissue, much has been done to convince us that the limit is far beyond anything yet attained. The oculists have displayed unbounded energy and exalted skill, as shown by their success in transplanting the cornea of the cat, dog and rabbit to the eyes of human beings, and of mucous membrane to the conjunction, for the correction of deformity as the result of eye troubles in infancy. It is now demonstrated that the nerves of lower animals may be successfully transplanted to the nerve stumps of man. Dr. Redart successfully grafted the skin of a chicken upon a child two years old. Dr. Bartens succeeded in grafting the skin of a dead man seventy years old to that of a boy fourteen years old. Dr. Walfler was equally successful in transplanting the mucous membrane of frogs, rabbits and pigeons to mucous areas in man previously occupied by cicatricial tissue, and was the first to show that mucous membrane remains so if transplanted to mucous membrane, and become skin if transplanted to skin.

"I have succeeded in grafting the skin of a frog to that of a tortoise, and the skin of a tortoise to that of a frog; and also in securing the growth of a frog's skin upon the skin of a man fifty-four years old. Bone-grafting is not so far advanced, but has met the same success as skin-grafting. Enough has been accomplished to satisfy me that the day is not far distant when the long bones and ribs of the lower animals will be successfully transplanted to man for the purpose of restoring osseous structures destroyed by any cause whatsoever. I am inclined to believe that the tails of such animals as the cat, dog, opossum, etc., after being divested of the integument and soft tissue, may be transplanted with success. It may be found that the ribs of lower animals can be substituted for the small bones of the hand."

Dr. Thomas H. Manley, of New York, ably discussed the paper, and gave many corroborative instances from his hospital practice. He thought there was a future for the procedure yet undreamed of.

Dr. Joseph C. Greene, of Buffalo, read an interesting paper, detailing in part his personal experience with *Leprosy*, showing its distribution along coast lines, and the localities showing the foci of contagion. He mainly confined himself to the epidemiology and history of the disease. A large map aided in giving force to his remarks.

Dr. Homer O. Jewett, of Cortland, discoursed upon the *Use and Neglect of Blood-Letting*, in which he advocated its therapeutical claims. He gave many instances where relief and perhaps cures in pneumonia, pleurisy and apoplexy were prompt. He thought that delay often deprived the measure of its triumphs.

Dr. John Shrady, of New York, in his paper on *The Psychical Aspects of Insanity*, after touching upon some of the difficulties of diagnosis, referred to the fact that treatment to be successful must consist in antagonizing one emotion with another.

In the afternoon the following papers were read either by the authors themselves or by title: *Tumors of the Orbit and Neighboring Cavities*, by Dr. C. S. Bull, of New York; *Test of Dugas in Dislocation of the Shoulder*, by Dr. F. W. Putnam, of Binghamton; *Early Infant Viability, with Management of Cases*, by Dr. H. C. Hendrick, of McGrawville; *Scarlet Fever in Puerperium, with Cerebral Hæmorrhage and Hemiplegia*, by Dr. C. S. Allen, of Greenbush; *Alcoholism as a Vice, and as a Result of Inherited or Acquired Brain Disease*, by Dr. I. de Zouche, of Gloverville.

Dr. Wm. H. Robb, of Amsterdam, exhibited an office battery, simple in construction and easily constructed by a person of ordinary ingenuity. He claimed for it easy portability and as taking up but little space.

Dr. Darwin Colvin, of Clyde, in his contribution with the title *In Abortion, what of the Placenta after the Second Stage*, advocated immediate removal. Drs. A. L. Carroll, S. W. B. M. McLeod, John Parsons and H. O. Jewett coincided with this view. Dr. E. D. Ferguson advised curetting with the finger or wire as the most effectual means of removal.

The other papers, to-wit: *Cysts and Cystic Formations; their Pathology, Diagnosis and Treatment*, by Dr. T. H. Manley, of New York; *Functional Disorders of the Nervous System of Women*, by Dr. T. J. McGillicuddy, of New York; *The Feeding of Infants*, by Dr. J. P. Garrish, of New York; and *A Case of Craniotomy, with Remarks*, by Dr. Jas. W. Guest, of New York, were crowded out by the lateness of the session, but were referred for publication.

Officers were elected as follows: President, Stephen Smith, New York; Vice-Presidents, A. F. Van Vranken, West Troy; J. D. Tripp, Auburn; R. J. Menzie, Caledonia; Members of Council, W. D. Garlock, Little Falls; George Douglas, Oxford; Theodore D. Strong, Westfield. Dr. E. D. Ferguson, of Troy, was re-elected Secretary. The treasurership was left vacant.

At 4 o'clock the retiring President, Dr. John G. Orton, surrendered his seat to his successor, Dr. Stephen Smith. After a brief address by the new President the meeting was adjourned. The new Council was immediately called together, and it was decided to hold the next meeting of the Association in Mott Memorial Hall on the fourth Wednesday of October, 1891.

FOREIGN CORRESPONDENCE.

LETTER FROM LONDON.

(FROM OUR OWN CORRESPONDENT.)

Self-murder on the Continent — Cremation — Opening of Queen Margaret College, Glasgow — Soja Biscuits for Diabetics — Housing of the Working Classes — Miscellaneous Gleanings.

From St. Petersburg comes a thrilling story of a Professor of Medicine who took poison in the very act of lecturing to his class, while in Paris the daily number of cases of self-murder is said to range from twelve to eighteen. Nor is there forthcoming any scientific explanation of the phenomenon of the sort in which the late Mr. Buckle took delight. In the spring people who are tired of life mostly drown themselves in the Seine, in the autumn they prefer to asphyxiate themselves by means of charcoal fumes. That is all the statisticians tell. The question which remains for the present unanswered is, What is the real cause of this alarming predisposition to self-murder?

Miss Graham, M.D., and Miss Baumler, M.D., former students of the London School of Medicine for Women, have been appointed lady doctors under the Marchioness of Dufferin's Fund in India. The former will serve at Rangoon and the latter at Lahore.

Cremation appears to be making way in Manchester. The report of the local society states that the limited company formed for the erection of the crematorium has been duly organized and registered, and that about three thousand shares have already been subscribed for. Under these circumstances the question has arisen whether the society may not be considered to have fulfilled its purposes, but on reflection it has been decided that there is room both for the Manchester Cremation Society and the Manchester Crematorium. The report observes, "The crematorium may be erected, but if public attention be not directed to its existence and the benefits arising from its use, the company will fail for want of adequate resort." It is pointed out that in this matter England has been outstripped by other countries. France, Italy, Germany and America all avail themselves to a much larger extent of this method of disposing of the dead. In Paris the Municipal Council has built a crematorium in the cemetery of Pere la Chaise, where in the first eight months 518 bodies were cremated. In Italy, where the first crematory, that at Milan, was built in 1874, there are now forty communes which have built furnaces for themselves. In England, on the other hand, there is but one at the present time, and that is situated at the inconvenient distance of twenty miles from London, and even there the number of cremations has so far reached a comparatively small number.

The present winter has seen the opening of Queen Margaret College, Glasgow. This gives to Scotland the distinction of possessing two schools for the training of lady doctors. It is difficult to believe now, with all the facilities that women enjoy for entering the medical profession, that it is only sixteen years since the London School of Medicine for Women was first opened amidst a storm of derision and contempt. It is history, too, how the University of Edinburgh refused admission to the sex and was backed by a decision of the Scottish Court of Sessions. Yet on the 1st of October, it is found that a fifth school is necessary in addition to those of London, Edinburgh, Dublin and Belfast, to meet the continuous demand from the East for lady doctors. The success which has attended the movement has exceeded the most hopeful claims made for it in years past by its pioneers, while many of its former opponents have frankly confessed that their opinions have been entirely changed on seeing that women doctors neither became unwomanly nor interfered with men in their pursuit of the profession.

It is now more than twenty years since Dr. Forbes Watson drew special attention to the high percentage of nitrogen—over 70 per cent.—contained in the cotyledons of the Soja hispida or "Soy" bean of India, but from some cause or other no attempts—or at least no successful attempts, appear to have been made to dietetically utilize the bean. Some new biscuits prepared from the Soja have been brought out, and these are stated to be well adapted for use amongst diabetic patients, by reason of the insignificant proportion of starchy and saccharine matters they contain. The biscuits, unlike several "diabetic" productions, are not at all unpalatable, and indeed may be said to be rather nice than otherwise. Consequently they are likely to become popular with patients.

Mr. Ritchie, in his capacity of President of the Local Government Board, has directed the attention of the County Councils in the country, and sanitary authorities, vestries and District Boards of the metropolis, to the provisions of the Act passed last session as to the housing of the working classes. This Act has greatly extended the powers of the local authorities. Heretofore in towns houses could not be condemned unless the medical officer of health alleged that the prevalence of disease in the district might be reasonably attributed to the sanitary defects of the dwellings. Henceforth it will not be necessary to await the outbreak of disease. The stable doors may be locked before the steed is stolen. It will be enough for the medical officer of health to represent that the sanitary defects are dangerous or injurious to the health of the inhabitants or their neighbors. The compensation to be given to the owners of any houses in an unhealthy area acquired for an improvement scheme will not be based on the rental if that rental has been swollen by dangerous overcrowding. If the houses are deemed utterly unfit for habitation, only the value of the land and of the materials of the buildings will be allowed. Apart from improvement schemes, important powers are given to the local authority to deal with unhealthy dwellings. The medical officer of health is expected to keep himself informed about such houses, and where he does not take action of his own accord he is bound to take notice of the complaint of any four neighboring householders. Urban sanitary authorities have also the power, under the new Act, of building and furnishing lodging-houses for the working classes, but this part of the Act cannot come into force in rural districts unless it has been adopted by the sanitary authorities after a local inquiry directed by the County Council.

A rather unusual case occurred at the Dover County Court. A surgeon sued a retired medical practitioner for £21 for professional attendance. Defendant contended that it was the custom in the medical profession not to charge each other for attendance. Plaintiff and another medical gentleman said that although it was not usual to charge a man in practice, it was usual to charge a retired medical man. With this the judge agreed and gave judgment for the plaintiff.

It appears after all that there is but slender foundation for the alarming report that the influenza epidemic had reappeared in the city of London. One leading practitioner states that he has heard of only four cases, and they were all in one family, while another suggests that the symptoms of other maladies have been mistaken for those of influenza.

The authorities of the Metropolitan Asylum Board have been compelled, in consequence of the rapidity with which fever cases are coming into the London hospitals, to open huts at Gore Farm, Darenth, for convalescing patients. For some time past the cases have been coming into the six hospitals at present open at the rate of forty a day, and at the present there are 2,147 cases under treatment.

With the object of continuing the work of popularizing the use of short-hand amongst medical students, an examination in general proficiency in short-hand and the methods of its use will be held at the Examination Hall of the Royal Colleges of Surgeons. G. O. M.

DOMESTIC CORRESPONDENCE.

"Limited Practice" and the Code of Ethics.

To the Editor:—The leading editorial in the *Peoria Medical Monthly* for September, 1890, commences with the following paragraph: "We believe the Code of Ethics of the American Medical Association permits of advertising to the extent of an announcement, '*Practice limited to diseases* ———,' following the name of the advertiser." And throughout the article the writer assumes that the Code of Ethics actually gives permission to advertise "practice limited" to this or that specialty, whereas, there is not a word in the Code of Ethics relating to specialties or to "practice limited," as I have had occasion to explain many times. The only clause in the Code refering to advertising is in the following words:

> It is derogatory to the dignity of the profession to resort to public advertisements or private cards or handbills, *inviting the attention* of individuals affected with particular diseases;—publicly offering advice and medicine to the poor gratis, or promising radical cures; or to publish cases and operations in the daily prints, or suffer such publications to be made; to invite laymen to be present at operations, to boast of cures and remedies, to adduce certificates of skill and success, or to perform any other similar acts. These are the ordinary practices of empirics, and are highly reprehensible in a regular physician.

The origin of the phrase, "practice limited," is to be found, not in the Code of Ethics, but in the

report of a committee on a revision of the Code of Ethics made to the Association in 1874, as the following quotation shows:

> The Code of Ethics very properly makes no mention of specialties or specialists, but presents plainly the rules necessary for the maintenance of professional character as applicable to all. But we are asked how, then, can those who wish to pursue a special practice make known their position to their brethren and the public? We answer that the title of Doctor of Medicine covers the whole field of practice, and whoever is entitled to that appellation has the right to occupy the whole or any part of the field, as he pleases. The acceptance of this honorable title is presumptive evidence to the community that the man accepting it is ready to attend practically to any and all duties which it implies. As all special practice is simply a self-imposed limitation of duties implied in the general title of Doctor, it should be indicated not by special qualifying titles, such as oculist, gynecologist, etc., nor by any setting forth of special qualifications, but by a simple *honest* notice appended to the ordinary card of the general practitioner, saying, "practice limited to the eye and ear," or to "diseases peculiar to women," or to "midwifery exclusively," as the case may be Such a simple notice of limitation, if *truthfully* made, would involve no other principle than the notice of the general practitioner that he limits his attention to professional business within certain hours of the day. Neither could it be regarded as a claim to special or superior qualifications. To give the specialist any privileges beyond this, would be to invest him with a special advantage inconsistent with the equality of rights and duties pertaining to the profession.[1]

It should be kept in mind that this quotation is simply the reasoning or comment of the committee and not a proposition to be incorporated into the Code. So far from this, the committee, after commenting on several other topics, closed its report with the following declaration: "After carefully reviewing the whole subject your committee do not recommend any alterations in the present Code of Ethics." And on motion of Dr. J. H. Van Deman, of Tennessee, the report was unanimously adopted by the Association.

Whether the suggestion of the committee, that the regular physician who honestly and actually restricts his practice to a fairly defined specialty, may so inform the public by saying on his card "practice limited to ———," is a question about which different opinions have been expressed, and concerning which no judicial action has been taken. But it is certain, as stated by the editor of the *Peoria Medical Monthly*, that the physician who makes such declaration on his professional card, must practice in strict accordance therewith. He cannot declare to the public and his professional brethren that his *practice is limited* to particular diseases or to diseases of particular organs, and continue to take charge of any and all cases that may come in his way, without making himself liable to the charge of deception and unprofessional conduct. And for that reason it is not likely to be generally adopted; simply because only a small percentage of the so-called specialists are willing to actually *limit* their practice to the legitimate boundaries of their chosen specialty.

Very truly, N. S. DAVIS.

Chicago, Ill., Oct. 25, 1890.

[1] See Transactions, Vol. 25, pp. 30–31, 1874.

To the Editor:—Please see page 446, second column, near top of page (for September 20, 1890), where your New York correspondent says: "Consumption being peculiarly a disease of *civilization* (italics mine), is nourished by bad air and overwork amid insalubrious conditions," etc.

Now, just what condition of living constitutes the condition the writer regards "civilization," I am unable to tell; but I do know—from years of personal observation—that our North American Indians, especially those that most nearly approach savagery, not only often die of various forms of phthisis, but are far more subject to tuberculosis (pulmonalis and other forms), than the white people of any city in the United States. And not only so, but the Indians who live and ramble over the Rocky Mountains, from British America to Mexico, are also quite subject to phthisis pulmonalis (and other forms of phthisis), notwithstanding they breathe (when out-doors) the best air on our continent. Your correspondent, and most all our Eastern (American) medical book-makers should, at least, make themselves very familiar with disease in all parts of our own country—to say nothing of foreign parts—before presuming to teach what they do not know.

See in 7th edition of "Da Costa's Diagnosis," page 904, where he says of dengue: "Dengue is generally a harmless disorder, epidemic and contagious."

While the notorious facts, in reference to the effects of dengue here in Texas, as it has prevailed more or less extensively, at times, for many years past, are that it is not a "harmless disorder" in any sense of that term, for it is well known that our puerperal (and pregnant women not advanced to full term) in many (I may say most) cases, lost their lives as a result of dengue, to say nothing of many male (and female) persons who were first made seriously and painfully sick for a week or more, and left invalided for several or many months, and if of consumptive tendency, to die within a year or less, of phthisis. Now is this a "harmless disorder?" Yet Dr. Da Costa is a learned physician, whom we (Americans) are all proud of, and delight to honor, but had he followed the example of the great medical philosopher, Daniel Drake, he would not have fallen into such harmful blunders. Da Costa should have studied dengue "on the ground," in its native domestic habitat, then wrote not as the "scribes" (of Eastern bookdom) but as "one having authority." As the great Trousseau so often urged us, we (as students) as writers, should be always seeing and studying patients, and under

all sorts of conditions and environment; then profoundly consider the why and wherefore of all we see and observe. But I hope you will pardon me for "bringing coals to Newcastle"—unbidden at that. Most respectfully yours,

Q. C. SMITH, M.D.

Austin, Texas, Oct. 17, 1890.

BOOK REVIEWS.

THE MEDICAL NEWS VISITING LIST, for 1891. Philadelphia: Lea Brothers & Co.

Messrs. Lea Brothers & Co. again present their compliments to the medical profession, and place upon the market their Physicians' Visiting List for the ensuing year. In addition to a variety of tables, valuable as a means of ready reference, such as doses, poisons and their antidotes, therapeutic tables, weights and measures, there are others upon artificial respiration, ligation of arteries, signs of dentition, and of pregnancy, urinalysis, and also a table of many of the newer remedies. The present arrangement of the book is the result of years of experience and will be found every way acceptable to the profession.

MISCELLANY.

LETTERS RECEIVED.

Dr. F. D. Green, Louisville, Ky.; Wilson & Webb Stationery Co., Little Rock, Ark.; Dr. C. Stover, Amsterdam, N. Y.; Dr. H. P. Jefferson, Lowell, Mass.; Dr. L. D. White, Keokuk, Ia.; Dr. A. G. Sinclair, Memphis, Tenn.; The New Orleans Medical and Surgical Journal, New Orleans, La.; C. A. Kirkly, Toledo, O.; Dr. J. E. Mears, Philadelphia, Pa.; Dr. H. Wardner, Post-Graduate Medical School and Hospital, Dr. J. C. Hoag, Chicago; Dr. R. W. Gardner, The Maltine Mfg. Co., J. F. Madden, Robinson-Baker Advertising Bureau, Dauchy and Co., I. Haldenstein, The Chas. H. Phillips Chemical Co., New York City; Dr. Chas. A. Eastman, Winthrop, Mass.; Dr. W. W. Wheeler, Muir, Mich.; Dr. A. R. Baker, Cleveland, Ohio; Dr. A. W. McColl, Toronto, Ont.; Dr. R. W. Campbell, Montreal, Canada; Dr. S. G. Webber, Jamaica Plain, Mass.; Dr. J. Mc. F. Gaston, Atlanta, Ga.; Dr. D. C. Brockman, Marengo, Iowa; Dr. A. D. Barr, Calamine, Ark.; Dr. J. W. Thornton, Kansas City, Mo.; Henry Bernd & Co., St. Louis, Mo.; Fort Dearborn National Bank, Dr. W. W. Hester, Chicago; Dr. I. A. Woodhull, Fort Leavenworth, Kansas; Dr. F. S. Dennis, New York City; W. C. Clemison, Warrenton, Mo.; Dr. B. A. Camfield, Chicago; Provident Chemical Works, St. Louis, Mo.; Dr. F. H. Caldwell, Sanford, Fla.

Official List of Changes in the Stations and Duties of Officers Serving in the Medical Department, U. S. Army, from October 25, 1890, to October 31, 1890.

First Lieutenant J. D. Glennan, Asst. Surgeon, is granted leave of absence for one month, to take effect about the 31st inst. Par. 1, S. O. 146, Dept. Missouri, October 23, 1890.

By direction of the Secretary of War, the following changes in the stations of officers of the Medical Department are ordered:

First Lieut. Chas. E. Woodruff, Asst. Surgeon, is relieved from duty at Ft. Gibson, Cal., and will report in person to the commanding officer, Ft. Missoula, Mont., for duty at that post, relieving Major Calvin DeWitt, Surgeon. Major DeWitt, upon being relieved, will report in person to the commanding officer, Ft. Hancock, Tex., for duty at that post. Par. 6, S. O. 249, A. G. O., Washington, October 24, 1890.

Capt. Charles B. Ewjng, Asst. Surgeon, leave of absence granted in S. O. 131, Dept. of the Missouri, September 22, 1890, is extended fourteen days. By direction of the Secretary of War. S. O. 250, A. G. O., October 25, 1890.

Capt. Guy L. Edie, Asst. Surgeon U. S. A. (Ft. Douglas, Utah), is granted leave of absence for one month, on surgeon's certificate of disability. S. O. 80, Hdqrs. Dept. of the Platte, Omaha, Neb., October 27, 1890.

Surgeon Stevens G. Cowdrey, U. S. A., is granted leave of absence for one month, with permission to apply for an extension of fifteen days, to take effect upon the arrival of Acting Asst. Surgeon A. P. Fricke at Ft. Marcy. Par. 2, S. O. 112, Dept. of Ariz., Los Angeles, Cal., October 24, 1890.

Official List of Changes in the Medical Corps of the U. S. Navy for the Week Ending November 1, 1890.

Surgeon F. B. Stephenson, detached from receiving ship "Wabash," and wait orders.

Surgeon H. M. Martin, ordered to the receiving ship "Wabash."

Asst. Surgeon Lewis H. Stone, ordered to the U. S. S. "Pinta."

Asst. Surgeon William F. Arnold, detached from the U. S. S. "Pinta," and granted two months' leave.

Surgeon Thomas Owens, detached from the Coast Survey Str. "Blake," and wait orders.

Asst. Surgeon N. J. Blackwood, ordered to the receiving ship "Vermont."

Asst. Surgeon E. S. Bogert, detached from the U. S. receiving ship "Vermont," and to the Coast Survey Str. "Blake."

Surgeon A. M. Moore, detached from the U. S. S. "Kearsarge," and to the Naval Hospital, Mare Island, Cal.

Official List of Changes of Stations and Duties of Medical Officers of the U. S. Marine-Hospital Service, for the Three Weeks Ending October 25, 1890.

Surgeon W. H. H. Hutton, detail as chairman Board of Examiners revoked; ordered to Washington, D. C., for temporary duty. October 14, 1890.

Surgeon Walter Wyman, to inspect quarantine stations. October 14, 1890.

Surgeon W. H. Long, detailed as chairman, Board of Examiners. October 14, 1890.

Surgeon H. W. Sawtelle, granted leave of absence for five days. October 13, 1890.

Surgeon J. M. Gassaway, granted leave of absence for thirty days. October 11, 1890.

Surgeon Fairfax Irwin, detailed as recorder, Board of Examiners. October 14, 1890.

P. A. Surgeon R. P. M. Ames, granted leave of absence for thirty days. October 14, 1890.

P. A. Surgeon J. H. White, granted leave of absence for thirty days. October 24, 1890.

P. A. Surgeon W. J. Pettus, to proceed to Vineyard Haven, Mass., for temporary duty. October 9, 1890.

Asst. Surgeon T. B. Perry, ordered to examination for promotion. October 9, 1890.

Asst. Surgeon J. J. Kinyoun, ordered to examination for promotion. October 10, 1890.

Asst. Surgeon A. W. Condict, to proceed to Baltimore, Md., for temporary duty. October 18, 1890.

RESIGNATION.

P. A. Surgeon R. P. M. Ames, resignation accepted by the President, to take effect November 15, 1890. October 14, 1890.